HIVOS

HUMANIST INSTITUTE FOR CO-OPERATION WITH DEVELOPING COUNTRIES, NETHERLANDS
HUMANISTISCH INSTITUUT VOOR ONTWIKKELINGESSAMENWERKING, NETHERLANDS

POVERTY AND DEPRIVATION: A SOCIO-ECONOMIC PROFILE OF BIHAR AND MADHYA PRADESH

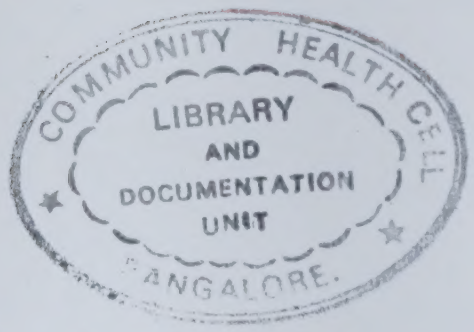
AUGUST, 1998

Leela Gulati
R. Ramalingam

POVERTY AND DEPRIVATION: A SOCIO-ECONOMIC PROFILE OF BIHAR AND MADHYA PRADESH

Leela Gulati
R. Ramalingam

AUGUST, 1998



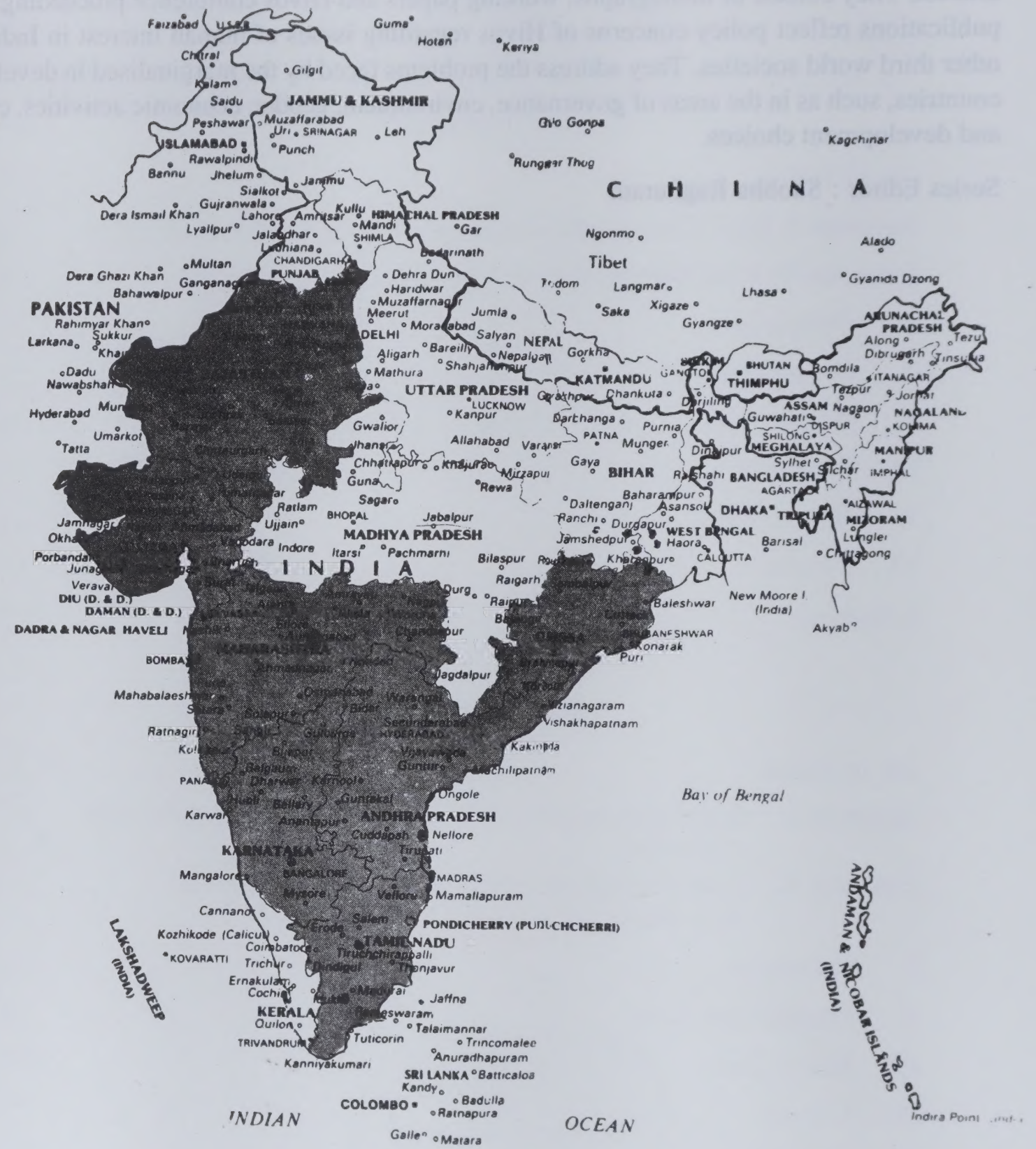
CONTENTS

Hivos Publications

These publications are part of the Hivos-India Regional Office's effort to participate actively in the debate and dialogue in India on issues of human development and emancipatory interest. They consist of monographs, working papers and Hivos conference proceedings. The publications reflect policy concerns of Hivos regarding issues of human interest in India and other third world societies. They address the problems faced by the marginalised in developing countries, such as in the areas of governance, environment, gender, economic activities, culture and development choices.

Series Editor : Shobha Raghuram

States where Hivos supports programmes



■ States where HIVOS supports programmes

PREFACE

Hivos completed in April 1998 its Five Year Policy Plan to guide and assist Hivos in prioritising its interventions in Asia which include India, Sri Lanka, Indonesia, Malaysia, Kyrgyztan and Kazakhstan. This policy document states the priorities for Hivos country-wise and policy-wise, thereby providing guidelines for support of development organisations and activities in the highly different Asian countries. During the preparation of the document Hivos Regional Office engaged with partners and independent development thinkers. The present study of socio-economic profiles of Bihar and Madhya Pradesh was part of this process. Readers may remember the earlier study completed by Gulati and Ramalingam, "Poverty and Deprivation Some Inter-State Comparisons" and published by Hivos in September 1996. That study provided an all-India, comparative perspective on poverty conditions, particularly in the states Hivos works in namely Karnataka, Andhra Pradesh, Tamil Nadu, Maharashtra, Orissa, New Delhi, Goa, Rajasthan, and Gujarat.

The studies on Bihar and Madhya Pradesh were initiated to provide comparative pictures of the levels of deprivation that have come to mark human development in Bihar and Madhya Pradesh. The Bihar study shows that the state lags behind the other states on most social and economic indicators. The state of women's well being with persisting low sex ratios and high maternal mortality rates deserve serious and immediate attention. The authors note that despite the progress made in Bihar with the establishment of primary health care centres in rural areas, the quality of health care needs more attention. Another matter of concern is that the literacy level for women when compared with all India has not narrowed down sufficiently, particularly so for SC and ST women. In the Madhya Pradesh study similar issues have been underscored by the authors. The physical distance between people and services, note the writers, serves as a critical barrier in excluding the poor from the fruits of development. The authors also report on the social environment in Madhya Pradesh where violence against SCs has accelerated, approximating to almost one third of reported atrocities all over India.

Two other areas of serious concern include child labour and bonded labour. The authors note that after Andhra Pradesh, Madhya Pradesh contributes the largest number of them, 78% of them being in the agricultural sector alone.

Because of the interest shown by members of the development sector for accessing the data here Hivos decided to publish these studies even though its presence in Bihar and Madhya Pradesh is marginal. The authors have included what they believe to be a critical selection of development issues, providing "easy-to-access" data. We hope that this study will be of use for our partners and friends in the development sector. ■

Ben Witjes
Director, Regional Office
August 19, 1998

SECTION I

BIHAR: A SOCIO-ECONOMIC PROFILE

LIST OF TABLES

BIHAR

BIHAR

ADMINISTRATIVE DIVISIONS, 1961

10 0 20 40 60 MLS.
20 0 20 40 60 80 100 KMS.

N
E
P
A
L
U T T A R P R A D E S H (C. ZONE)
M A D H Y A P R A D E S H (C. ZONE)
B I H A R
W E S T B E N G A L
O R I S S A

CHAMPARAN
BETTIAH
MOTIHARI
SITAMARHI
GOPALGANJ
MADHUBANI
SIWAN
SARAN
T I R H U T
MUZAFFARPUR
DARBHANGA
SUPAUL
ARARIA
KISHANGANJ
SAHARSA
MADHEPURA
PURNEA
CHAPRA
SAMASTIPUR
HAJIPUR
DINAPUR
PATNA CITY
BUXAR
ARRAH
PATNA SADAR
BARH
KHAGARIA
BEGUSARAI
KATIHAR
P A T N A
MONGHYR
BHAGALPUR
SAHABAD
BHABUA
JEHANABAD
BIHAR
SASARAM
BANKA
GODDA
AURANGABAD
GAYA
NAWADA
JAMUI
B H A G A L P U R
PAKAUR
DEOGHAR
DUMKA
CHATRA
GIRIDIH
SANTAL PARGANAS
GARHWA
DALTONGANJ
H A Z A R I B A G H
HAZARIBAGH
JHARIA
P A L A M A U
C H O T A N A G P U R
LATEHAR
DHANBAD
BAGHMARA
RANCHI
GUMLA
KHUNTI
R A N C H I
JAMSHEDPUR
SERAIKELA
SIMDEGA
S I N G H B H U M
CHAIBASA

REFERENCES

- INTERNATIONAL BOUNDARY
- ZONAL BOUNDARY
- STATE BOUNDARY
- DIVISIONAL BOUNDARY
- DISTRICT BOUNDARY
- SUBDIVISIONAL BOUNDARY
- CAPITAL
- DISTRICT HEADQUARTERS
- SUBDIVISIONAL HEADQUARTERS

* HEADQUARTERS OF BAGHMARA SUBDIVISION AT PRESENT LOCATED AT DHANBAD

M. ABBAS

Hivos 1998

STATEMENT I

Basic Demographic Indicators of Bihar and India, 1981-1992

Index		Bihar	India
Population	(1991)	86,374,465	846,302,688
Per cent population increase	(1981-91)	23.5	23.9
Density (Population/Km^2)	(1991)	497	273
Per cent urban	(1991)	13.1	26.1
Sex ratio	(1991)	911	927
Per cent 0-14 Yrs old			
	1981	41.7	39.1
	1991	40.6	36.3
Per cent 65+ Yrs Old			
	1981	3.7	3.8
	1991	3.8	3.8
Per cent scheduled caste	(1991)	14.6	16.7
Per cent scheduled tribes	(1991)	7.7	8.0
Per cent literate	(1991)[1]		
Male		52.5	64.1
Female		22.9	39.3
Total		38.5	52.2
Crude birth rate	(1992)	32.3	29.2
Crude death rate	(1992)	10.9	10.1
Exponential growth rate	(1981-91)	2.11	2.14
Total fertility rate	(1991)	4.4	3.6
Infant mortality rate	(1992)	73	79
Life expectancy	(1986-90)		
Male		55.7	57.7
Female		53.6	58.1
Couple protection rate	(1992)	24.7	43.5

Source: Office of the Registrar General (1992, 1993a, 1994a & 1994b) Office of the Registrar General and Census Commissioner (1987) Ministry of Health and Family Welfare (1991-92). National Family Health Survey, Bihar 1993.

Note: [1]Based on the population age 7 and above.

STATEMENT II

Trends in Basic Demographic Indicators, Bihar 1971-1991

Indicators	1971	1981	1991
Population	56,353,369	69,914,734	86,374,465
Per cent population increase (previous decade)	21.3	24.1	23.5
Density (population/KM^2)	324	405	497
Per cent urban	10.0	12.5	13.1
Sex ratio	954	946	911
Per cent 0-14 Yrs old	42.6	41.0	40.6
Per cent 65+ Yrs old	3.2	3.7	3.8
Per cent scheduled caste	14.1	14.5	14.6
Per cent scheduled tribe	8.8	8.3	7.7
Per cent literate			
Male	30.6	38.1	52.5
Female	8.7	13.6	22.9
Total	19.9	26.2	38.5
Crude birth rate	U	39.1	30.0
Crude death rate	U	13.9	9.8
Exponential growth rate	1.93	2.16	2.11
Total fertility rate	U	5.7	4.4
Infant mortality rate	U	118	69
Life expectancy			
Male	U	55.2[b]	55.7[c]
Female	U	52.9[b]	53.6[c]
Couple protection rate	5.5	12.3	24.7[d]

a: Based on the population age 5 & above for 1971 & 1981 and population age 7 and above for 1991.

b: 1981-86.

c: 1986-90.

d: 1992.

Source: Office of the Registrar General (1982, 1985, 1992, 1993a, 1994a, 1994b): Office of the Registrar General & Census Commissioner (1974, 1976, 1984b, 1987): Ministry of Health and Family Welfare (1989, 1991, 1992): National Family Health Survey, Bihar 1993.

Note: U: Not available

I

BIHAR : A SOCIO-ECONOMIC PROFILE

I. ORIENTATION

Bihar derives its name from the town of Vihar which also means a Buddhist Monastery. It is the land of Gautama Buddha and Mahavir Jain. Bihar is mentioned in the vedas, puranas and epics.

The state has a glorious history. For over a thousand years the history of India was much the history of Bihar. Pataliputra (present Patna) was the capital of renowned ancient kingdom of Magadha for a long time and was closely connected with famous kings, Chandragupta and Asoka. The state flourished in all respects during the regime of kings of the Gupta dynasty, (AD 320-480) known in Indian history as the "Golden Age." Two famous scientists of that period were Aryabhata and Varahamira.

In ancient times the state was very famous for its various seats of learning. The famous universities which attracted students and scholars from far and near were Nalanda, Vikram Shila (now Bhagalpur) and Udaipuri (now Bihar-Sharif).

Bihar is a land locked state, bounded by Nepal on the north, West Bengal on the east, Uttar Pradesh and Madhya Pradesh on the west and Orissa in the south. The lifeline of this state is the river Ganges, or Ganga, which enters the state from the west and eastward. One of the main tributaries of the Ganga is Kosi, called also the "Sorrow of Bihar", because of the frequent devastations it causes by changing its course. The state is divided into 10 administrative divisions, 42 districts and 587 blocks (See Bihar Map on Administrative Division, 1961).

On the basis of its physical features the state can be divided into three distinct topographical units. These are the Himalayan foothills, the Bihar plain and the Bihar plateau. The Himalayan foothills are located in the northern part of the state and consist of ranges which are part of the Himalayan system. The Bihar plain which is flat and alluvial can be further divided into two unequal parts, north Bihar plain and the south Bihar plain.

The north Bihar plain, a riverine fertile plain, has the highest population density in the country. It constitutes 31 per cent of the area of the state. With a number of big rivers flowing, this region is subject to frequent floods causing heavy damage to crops and property. The area is predominantly rural, the urban population being only six per cent. It has very poor infrastructural facilities, in terms of irrigation, communication, and transport facilities. It is an area of endemic poverty and hence the out migration of men from the area to other states is sizeable.

The south Bihar plain constitutes another 21 per cent of the state's total area. It has the lowest rainfall and is considerably more urbanized than the north Bihar plain. The infrastructure facilities are also much better here. A large part of this region is currently witnessing radical peasant and labour movements.

The Bihar plateau, popularly known as the Chottanagpur, consists of a series of plateaus of different elevations. The region is both topographically and culturally totally different from the rest of the state. The land in this region is not fertile due to soil spill and barely 30 per cent of the total land is used for crop production as compared to 50 per cent in the whole state. Forests account for 29.2 per cent of the total area of the plateau. Historically, before the British it was an inaccessible forest region. Poorly served by irrigation, about 10%, its agriculture is carried on entirely under rain fed conditions. The plateau is however rich in mineral deposits. Almost 90 per cent of the minerals found in Bihar are located in this region. As a result, a large number of metal based industries are located in this region and the level of urbanization is as high as 20 per cent, as against the whole state's 13 per cent. This region also has a high concentration of scheduled tribes (STs). 92 per cent of the 6.6 million STs of the state live here. The continued exploitation and erosion of tribal livelihood has resulted in many revolts since the British times. Currently, there is a powerful movement to separate this region from Bihar to create a new state of Jharkhand.

Bihar, with its population of 86.34 million (Census, 1991), comprising about 10% of India's total population, is the country's second most populous state after Uttar Pradesh. In terms of population density, Bihar's density of 497 per sq. km is almost twice that of the whole country, namely 274 per sq. km, with having to accommodate such a large part of the country's population on 5.3% of the geographic land area of India. There is a large variation in the density per sq.km. among the districts, ranging from 127 in Gumla to 1130 in Patna district. Patna, the capital of Bihar, is situated on the bank of the river Ganga.

Economy

Bihar is also one of the least urbanized states in India with only 13 per cent of the state's population living in urban areas. The pace of urbanization is also very slow compared to the other states. In 1971 only 10% of Bihar's population was urban, and by 1991, it had increased only by three percentage points. With 87 per cent of the population living in rural areas, as against 74 per cent in the whole country, Bihar is predominantly an agricultural state. Agriculture is the single largest sector of the state's economy employing 87 per cent of the work force and accounting for 40 per cent of the state's income.

Although agriculture is the mainstay of the people of Bihar, the land-man ratio in the state is one of the lowest in the country. So also is the situation with regard to the average size of agricultural land holding (0.87 hectare in Bihar compared to 1.68 hectare for all-India). Rice and wheat are the state's main crops. Almost 90 per cent of the cropped area is used for growing food crops. Some districts in the state are chronically drought prone such as Palamau and Hazaribagh in south Bihar and some are chronically flood prone such as Chanmparan and Darbhanga in north Bihar. As a result, livelihood from agriculture in the districts is very precarious.

The state is quite rich in mineral deposits. Coal, iron ore and bauxite are the principal minerals of the state. A number of resource based industries in public and private sectors are located in

south Bihar, specially in the districts of Dhanbad and Singhbhum, to avail themselves of the locational advantages. However, the state has not benefited sufficiently from the forward linkages of these industries, with the result that the economy of the state, or this particular region, has little to show by way of continuing growth in income and employment.

Bihar's state domestic product is derived from three sectors of the economy; the primary sector comprising agriculture generating 46 per cent of state income; secondary sector comprising of mining and manufacturing, contributing 26 per cent of states income; and tertiary sector contributing 28 per cent of the state income.

Despite fertile land and rich mineral deposits, Bihar has been at the bottom, among all the states of India, in terms of per capita income. Between 1960-61 and now, Bihar's already low position has become worse. Bihar's per capita income was two-thirds of India's average per capita income in 1960-61; it declined to almost half by early 1990s (for 1993-94, Bihar's per capita net state domestic product was 51.7% of the national figure). The state's annual rate of economic growth during this period was 2.40% which, after adjusting for the rate of population growth of 2.08%, gives only 0.35% growth of per capita income since 1960 [Sharma, 1994].

Castes & Tribes

Bihar is characterised by a complex hierarchy of castes. As for the general population i.e., other then SCs and STs, at the top of the hierarchy are the forward castes comprising of Brahmins, Bhumihar, the Rajputs and Vaishyas. Below them are the backward castes. Koirs, Kurmis, Yadavs, the agricultural castes. Below them are the most backward castes, artisans and workers. Next are the Scheduled Castes and at the bottom Scheduled Tribes who comprise Santals (agricultural), Oraons (semi-agricultural), Mundas (hunting), Ho (fishing). (see Verma 1991).

The scheduled castes (SC) and scheduled tribes (ST) constitute the lowest rung of the caste hierarchy. The SC and ST population constituted 14.6 per cent and 7.7% respectively of the state's population in 1991. While SC population is more or less evenly distributed over the districts STs are concentrated in the three districts of Ranchi, Singbhum and Santal Pargana comprising 56.41 per cent, 44.08 per cent and 36.80 per cent respectively of the population in those districts. Santal Pargana is one of the tribal districts where the population of the tribes is more than 99 per cent, followed by Palimau and Giridh. Though there has been industrial development in areas where the tribals live, the condition of the local tribals has not improved appreciably because of the rather low local linkages of this type of development.

The caste system also complicates access to and ownership of land. The scheduled castes and scheduled tribes own only 8.3% and 7.4% of the total number of operational holdings respectively; the average size of their holdings was 0.54 hectares and 2.57 hectares respectively as per Agricultural Census of 1980-81.

II. DEMOGRAPHY

In 1991, the population of Bihar was 86.37 million. Table 1 presents the population growth of the state between 1951-1991 and compares it with that of the whole country. The population growth rate in Bihar has been lower all through the recent decades compared to India's. It is noteworthy however that in the most recent two decades of 1971-81 and 1981-91, the disparity in population growth rate between India and Bihar has narrowed very considerably. Behind this increasing proximity in overall population growth rates, there exist significant differences this can be seen in respect of birth and death rates.

Table 1

Population of Bihar and India 1901-1991

Census Year	Bihar		India	
	Population	Growth Rate	Population	Growth Rate
1901	27.31	-	238.39	-
1911	28.31	+3.67	252.09	+5.75
1921	28.12	–0.66	251.32	–0.31
1931	31.34	+11.45	278.97	+11.0
1941	35.17	+12.20	318.66	+14.22
1951	38.78	+10.27	361.08	+13.31
1961	46.44	+19.76	439.23	+21.51
1971	56.35	+21.33	548.15	+24.80
1981	69.91	+24.06	658.18	25.00
1991	86.37	+23.5		

Source: Census of India 1981.

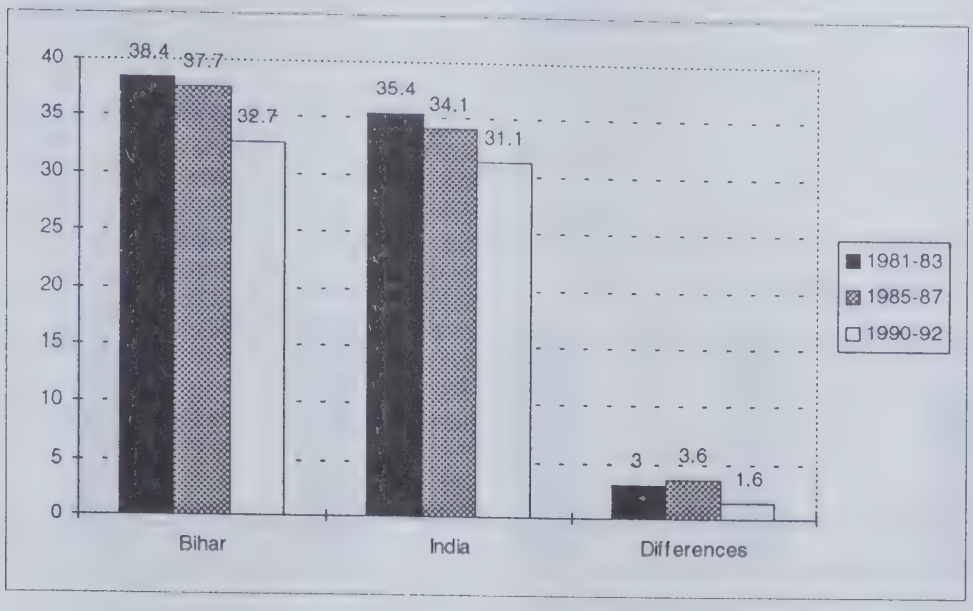
Note: Between 1981-1991, the inter censal growth rate has shown a decline of only one tenth of 1%.

Birth Rate

As can be seen from Table 2 the crude birth rate of 32.7 per 1000 persons in Bihar was higher than the all-India birth rate of 31.1 during 1990-92, the excess being of 1.6 per 1000. In 1981-83, the birth rate in Bihar was as high as 38.4 compared to India's 35.4 and the excess then was of 3.0 per 1000. Clearly, the excess in Bihar's birth rate over that of the country's is on the decline and the fact that in the span of ten years the excess has declined to almost half is quite noteworthy.

Table 2

Birth Rates (Rural) Bihar and India



Source: SRS, Jan 1994, (Vol. 28: No. 1) cited in EPW Special Statistics.

Note: *Birth rates are expressed as birth per 1,000 population. ** Bihar minus India.

Death Rate

While the birth rate in Bihar continues to exceed that of the whole country, the state's death rate also continues to be above that of the country as a whole. According to the latest available information, death rate in Bihar was 10.4 per 1000 as against all-India's 9.2 per 1000.

Sex Ratio

The ratio of women to men, right from the turn of the century, has been lower in Bihar than in the whole country and shows a steep decline over the years. In 1991 the sex ratio of Bihar's population was among the most heavily skewed against women in the country, being as low as 911 women to 1000 men (See Table 3). Such persistent and sharp decline in the ratio of women to men could have been caused by the excess of female mortality, reflecting thereby unequal access by gender to the means to sustain life. It also suggests that women are undervalued to such an extent that even their survival is problematic. Obviously, various social and cultural factors have operated to deny women in Bihar the same nutrition, health care and other support services that men receive.

An investigative report by Adithi, a Patna based NGO recently in an article on female infanticide in Bihar in 1996, had this to say. "Minutes after birth, the fate of the girl child in Bihar is sealed using barbaric methods, in practice for generations; parents, grand parents, midwives or doctors murder new-born girls with impunity." Four blocks with lowest sex ratio in the 0-6 age groups had these rates.

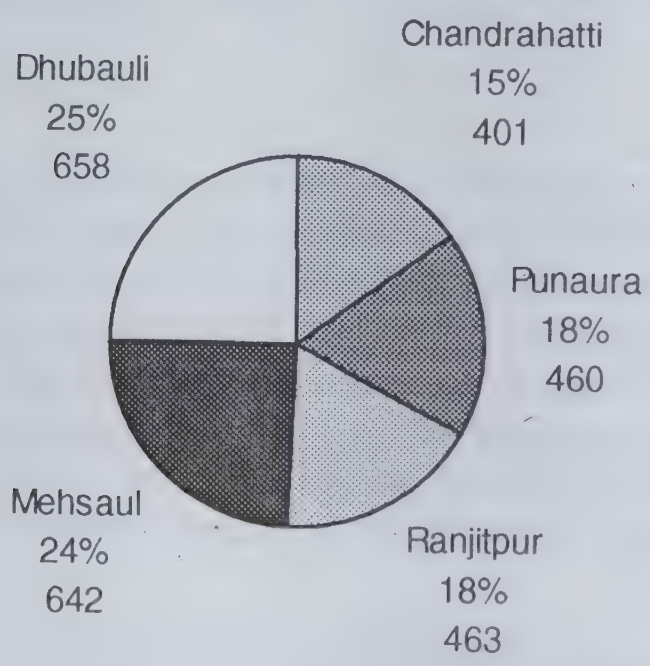
Block	Districts	0-6 Sex ratio
Dumra	Sitamarhi	819
Gopalpur	Bhagalpur	739
Bhavanpur	Purnea	757
Pa]kot	Gumla	781

Source: Humanscape, January 1996.

Note: Sex ratio is the number of females to 1,000 males. The sex ratio presented is the ratio of women to the number of men.

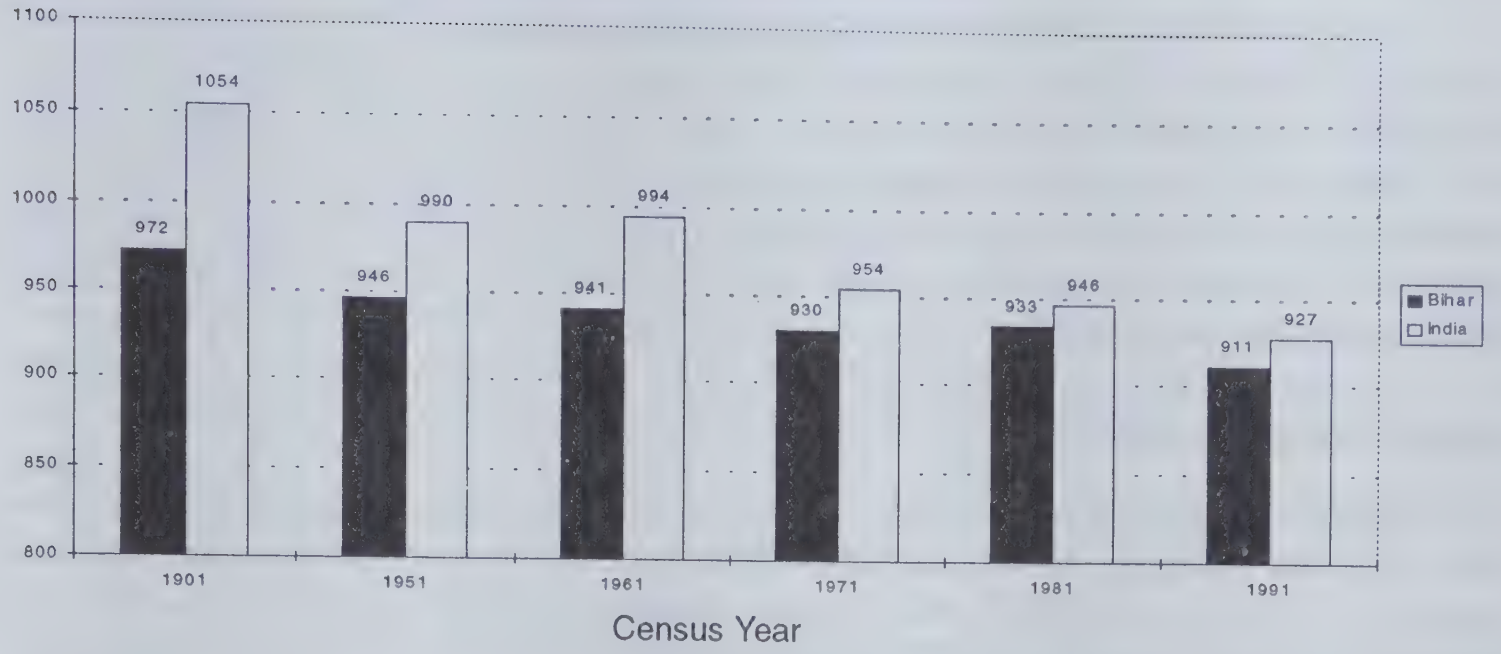
The sex ratio in village Punaura, block Dumra district Sitamarhi, was recorded as 460 girls per 1000 boys in the age group 0-6 years in the 1991 census. House to house survey conducted by Adithi, revealed that in the age groups 0-3 years, there were 157 death of girls per 100 deaths of boys. Similar results were obtained in number of villages. Five villages according to the 1991 census even had lower sex ratio. Many grass roots and political workers said they had observed an increase in female infanticide and foeticide in all segments of the society

Sex Ratio



Note: Sex ratio is the number of females to 1,000 males.

Table 3
Sex Ratio 1901, 1951 - 1991



Source: Census of India 1981-1991.

Note: The sex structure of a population is generally measured as the ratio of the total number of one sex to the total number of the other. The sex ratio is the ratio of the number of one sex to the other. The Indian census measures the number of females to males.

Expectation of Life

Life expectancy is considered a broad measure of well being. It shows the average life span of men and women in a population. Life expectancy for both men and women is low in Bihar; for women it is even lower. Women have been all along at a greater disadvantage but seem to have improved their position in recent years (1988-91) on the basis of some estimates. This can be seen from Table 4. Though male as well as female life expectancy in Bihar is still lower than that for all-India, the gap in female life expectance between Bihar and all-India has narrowed from 4.1 years during 1981-88 to 1.4 years during 1988-91.

Table 4
Life Expectancy

	1981-88		1988-91	
States	Male	Female	Male	Female
Bihar	54.9	52.3	57.00	57.63
India	55.6	56.4	58.1	59.10

Source: EPW, Special Statistics, 1994. CMIE 1996.

Note: The expectations of life at birth is the mean length of life. It represents the average number of years that a member of a "cohort" of birth would be expected to live if the cohort were subject to the mortality conditions expressed by a particular set of "age specific mortality rates".

Total Fertility Rate

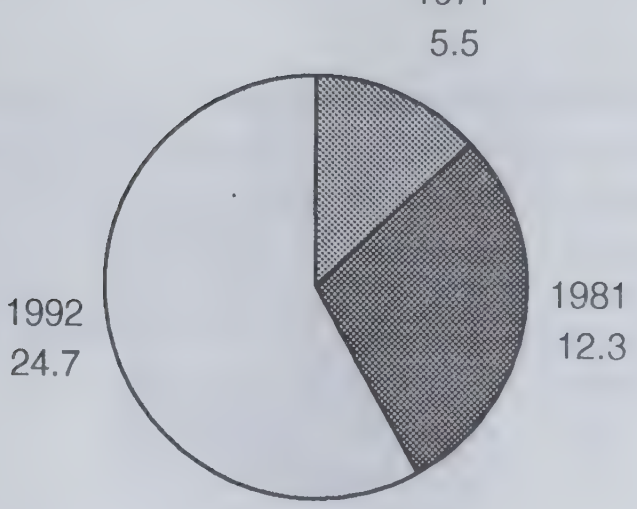
Total Fertility Rate (TFR) represents the average number of children that a woman would bear if she experienced current fertility rate throughout her reproductive years. The TFR for India according to the SRS estimate, was 3.6 for 1991, Bihar it was 4.4. One of the reasons for the prevalence of high TFR in Bihar is that even in 1992 only 25 per cent of the couples in the state were protected by various family planning methods as against the all-India level of 44 per cent. Difference in fertility rate by religion and caste is quite pronounced in the state. Fertility is higher by 37 per cent among Muslim women than Hindu women whereas TFR among SCs and STs is lower than the others.

Couple Protection Rate

The couple protection rate in Bihar was very low in 1971. It is still way below the other states with only one-fourth of the couples being protected. At the same time, it should not go unnoticed that within a period of two decades the couple protection rate in Bihar has improved from 5.5% in 1971 to 24.7 per cent in 1992 (See Table 5).

Table 5

Couple Protection Rate



Source: SRS, 1993.

Note: Proportion of currently married women using some method of contraception.

While the practice of contraception in the state is low in Bihar, 95 per cent of the women have been found to be aware of at least one method of family planning (NFHS 1993, Bihar). It is quite likely therefore that with the access to family planning services improving the practice of contraceptions in Bihar will increase.

Age at Marriage

The National Family Health Survey (NFHS) 1993 showed that in Bihar 69 per cent of women aged 20-24 got married below the legal minimum age of 18 years. The figures of mean age at marriage of women computed from the various censuses and the 1993 survey are presented in Table 6 the 1991 census records that 13.42 per cent of the girls in Bihar were married before completing the age of twelve. Child bearing among teenage women is still quite common in the state. According to NFHS 5.5% of women aged 17-19 years had begun child bearing. Another study (by Adithi), reported that 17.63 per cent of their respondents had their first pregnancy at the age of 16. Thus, the situation continues to exist in Bihar where teenage pregnancies can be encountered in quite a large number. These various studies seem to confirm that not only the age at marriage in Bihar continues to be low but the onset of pregnancy at tender ages is widespread.

Table 6

Mean Age at Marriage, Bihar 1963-1993

Year	Singulate Mean Age at Marriage		
	Men	Women	Differences
1961 Census	18.9	14.3	4.6
1971 Census	20.0	15.3	4.7
1981 Census	21.6	16.6	5.0
1993 NFHS			
Urban	25.4	20.3	5.1
Rural	22.7	17.6	5.1
Total	23.2.	18.0	5.2
Backward Districts	22.1	17.4	4.7

Source:NFHS - 1993, Bihar

Note: The average age at which the men and women get married.

It can also be seen from Table 6 that on an average males in Bihar marry 5.2 years later than females. Marriage ages are higher in urban areas than in rural areas for both women as well as men. However the gender difference in age at marriage is the same for rural as well as urban areas and its implications for the incidence of widowhood cannot be overlooked.

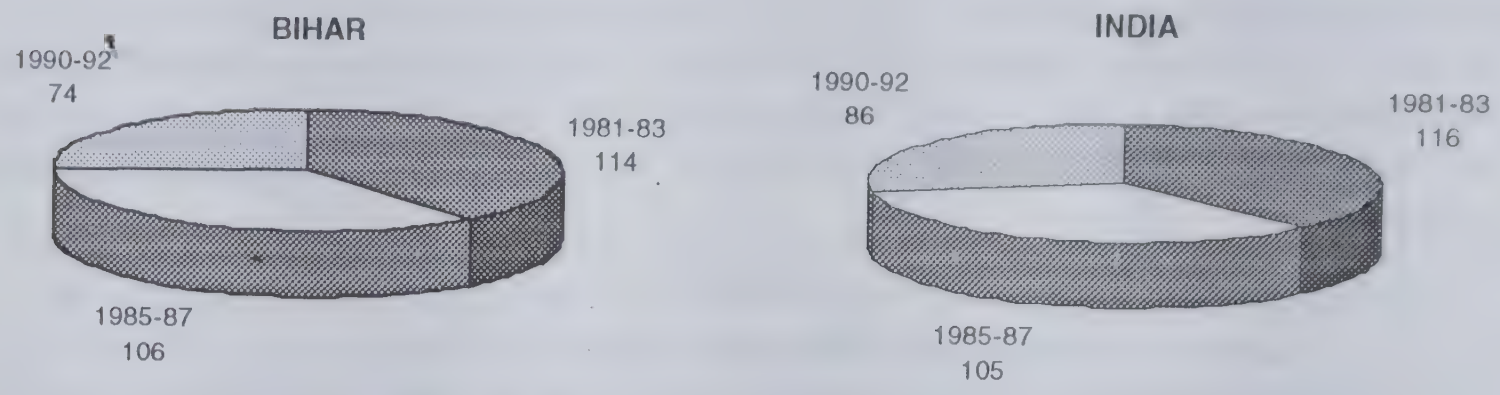
Infant Mortality

Infant mortality rate (IMR) for the state as well as for the country are given in Table 7. It is remarkable that Bihar experienced a rapid decline in IMR from the level of 114 per 1000 live births in 1981-83 to 74 in 1990-92. The decline in IMR was by more than a third in Bihar where as it was by around 25 per cent in the country as a whole, so that IMR in Bihar is now lower

than the national average. The highest reduction in IMR is seen to be between 1985 to 92. During this very period the overall death rate was also found to have come down drastically. Child survival is influenced by several factors. Issues of child survival are very closely connected with both maternal capabilities and public provisioning of health services.

Table 7

Infant Mortality Rate



Source: SRS, EPW, Special Statistics. 1994.

Note: The infant mortality rate is the ratio of the infant deaths i.e., the infant deaths of children under one year of age registered in a given year to the total number of live birth registered in the same way.

The NFHS results (see Table 8) show that IMR is much higher in Bihar's rural areas (102) than in its urban areas (62). Also, it declines sharply with mother's education. Children of SCs have the highest IMR (120). This points to the need for evolving special programmes on maternal and child health with a focus on SC population. Another finding of the NFHS is that the state is still far behind in meeting the goal of universal immunization of children. There is an urgent need for concerted efforts in this direction also.

Table 8

Infant Mortality by Background Characteristics

Background Characteristics	Infant Mortality (1993) per 1000 births
Residence	
Urban	62.1
Rural	102.1
Backward districts	98.7
Mother's Education	
Illiterate	103.1
Literate < Middle Completed	80.1
High School & above	54.1

Contd.

Background Characteristics	Infant Mortality (1993) per 1000 births
Religion	
Hindus	95.1
Muslims	104.4
Caste/Tribe	
Scheduled Castes	120.4
Scheduled Tribes	97.2
Others	94.0
Medical Maternity Care	
No antenatal or delivery care	87.6
Either antenatal or delivery care	79.2
Both antenatal and delivery care	44.7
Total	97.0

Source: NFHS, 1993

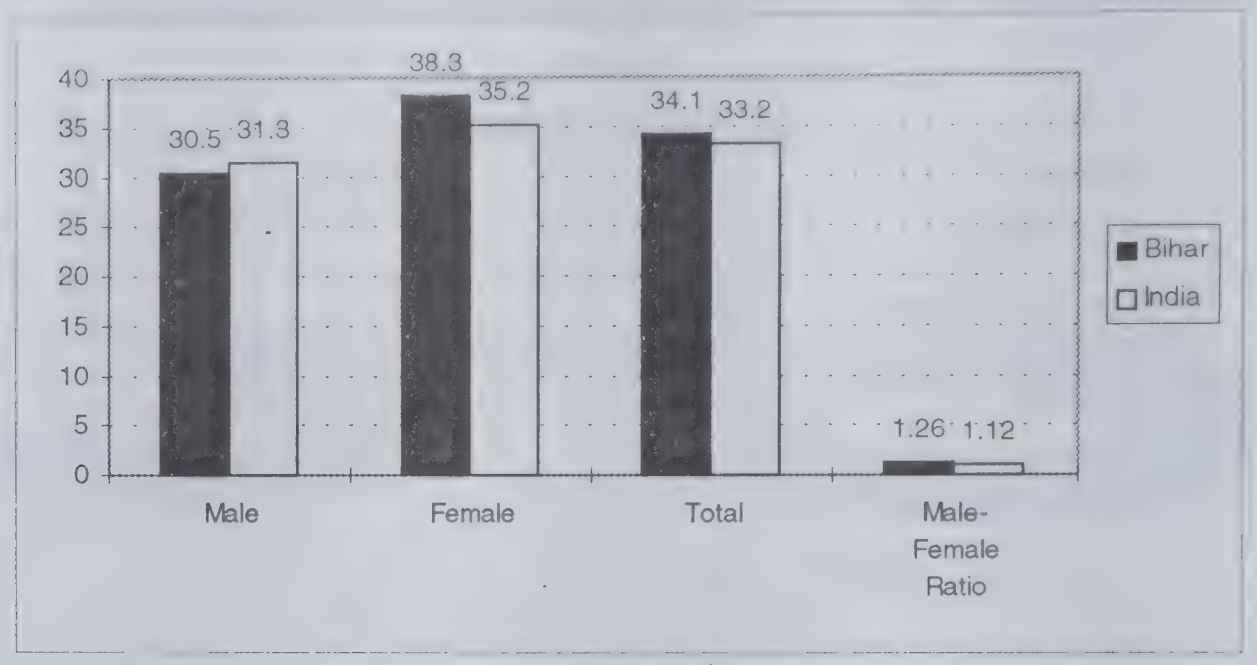
The remarkable decline in Bihar has still to be explained, particularly since, as was noted above, there still persists the practice of early teenage marriage of women in Bihar. A great deal of effort by international agencies appears to have gone into efforts to establish a better health delivery system in the rural areas of Bihar. All existing workers have been trained and the availability of a health worker for every 5000 rural population has been insisted upon in recent years. It is possibly this effort that has yielded dividends in the form of substantially reduced IMR in Bihar.

Sex Differentials in Childhood Mortality

There is preference for boys throughout much of the country and in Bihar also. As a result girls suffer severe neglect in many respects, including healthcare. This is reflected in patterns of child mortality. Table 9 presents the information in regard to male and female child mortality in Bihar and for whole of India.

Table 9

Estimated age specific death rates in 0-4 years, Bihar and India 1989, Rural (per 1,000 age group population)



Source: Uplekar & George, 1994.

Sample Registration Bulletin 1989, Registrar General of India, Vital Statistics Division MHA. New Delhi -PP 73, 103-143

It can be seen that female child mortality in Bihar exceeds male child mortality by twice the percentage points of the gap for all-India (7.8 as against 3.9), because mortality rates for ages 0-4 are particularly more pronounced in Bihar than in the whole country when it comes to female children.

Maternal Mortality Rate (MMR)

Maternal mortality is also an important index of a community's commitment to women's health care. Unfortunately, MMR for Bihar is the highest among the states. The causes of maternal death are many. Some of these like early age at marriage, early pregnancies have been dealt with already. In addition, lack of adequate pre-natal and birth care can be an important contributing factor. Births that take place under institutional care can be a great help in reducing the MMR. Even if births are attended to by trained professional, it could be a help. Very few women in Bihar have access to any help except the untrained professional as can be seen from Table 10.

Table 10

Percentage Distribution of Attended Births in Bihar and India 1989.

	Bihar			India		
Index	Rural	Urban	Total	Rural	Urban	Total
Institutional	9.30	27.40	11.30	15.20	51.00	21.80
Trained Professional	12.10	27.70	13.80	19.30	25.70	20.50
Untrained Professional	78.60	46.90	74.90	65.50	23.30	57.70

Source: Upleker & George, 1994.

An important index of maternal and child health services is the proportion of deliveries under proper hygienic conditions and the availability of supervision of trained health professionals to ensure better health for the mother and the child. As can be seen from Table 10 only 21 per cent of the births in rural Bihar occurred under the care of the institutions and or trained professionals. Almost 80 per cent of the rural births were not delivered in an institution and were not even assisted by trained birth attendants.

Table 11 presents more recent figures with regard to assistance at delivery based on NFHS findings. The percentage of live births delivered at home in Bihar is as high as 92 and among such deliveries 61 per cent are attended by Traditional Birth Attendants, 25 per cent by untrained persons and the remaining 6% by doctors or nurses.

Table 11

Assistance at delivery 1992-93

State	Delivered in Institution					Not Delivered in Institution			
	Public		Private						
	Doctors	Others	Doctors	Others	Total	Doctors	Other Health Prof.	TBA	Other
Bihar	2.8	1.1	3.0	0.7	7.6	2.7	3.9	60.9	24.9

Source: NFHS 1993.

III. HEALTH

Access to Health Care

Considerable effort has been made in recent years to extend health care to the rural population through the establishment of community health centres (CHCs), primary health centres (PHCs), and sub-centres (SCs). As a result, the population coverage in rural Bihar has improved significantly (see Table 12). However, the access is still much behind the rest of the country.

Rural hospitals are still extremely inadequate, and compare unfavourably with the availability in the country as a whole. While Bihar does not lag far behind the country in regard to the population coverage by PHCs and SCs, the maximum radial distance covered by PHCs and SCs in the state is significantly larger than in the case for all India. This means that the physical access of remote villages to these health centres is below par when compared to the position in the whole country.

Table 12

Rural Public Health Infrastructure - 1992

State	Average Rural Pop. served by sub-centres	Average Rural Pop. served by PHC	Average Rural Pop. served by CHC (in lakh)	Max. Radial dist. covered by SC (in kms)	Max. Radial dist. covered by PHC (in kms)	Max. Radial dist. covered by a CHC (in kms)
Bihar	5065	30060	7.07	1.91	4.66	22.63
India	4795	30083	3.04	2.76	6.92	22.03

Source: Uplekar & George, 1994.

A study conducted in 1991 examined the question of access of villages to health centres in terms of the availability of bus services. It was found that while PHC villages were well served with bus services (Bihar's PHC villages seem to do better than in the case for all India), SC villages are not so well served (62 per cent of these villages in Bihar are not served with bus services compared to 30 per cent of SC villages in the country as a whole). The position of remote villages in Bihar in this regard is also far below this.

Table 13

Availability of Bus Services in PHC, SC and Remote Villages, 1991

State	PHC Villages			SC Villages			Remote Villages		
	% Av.	% N.Av.	No. of Vill.	% Av.	% N.Av.	No. of Vill.	% Av.	% N.Av.	No. of Vill.
Bihar	95.24	4.76	21	37.86	62.12	66	19.38	80.62	129
India	92.65	7.35	381	70.41	29.59	1183	44.73	52.27	2229

Note: Av. - available: N.Av. - not available, Vill. - villages.

Source: Evaluation of quality of family welfare services at Primary Health Centre level: An ICMR task force study, 1991.

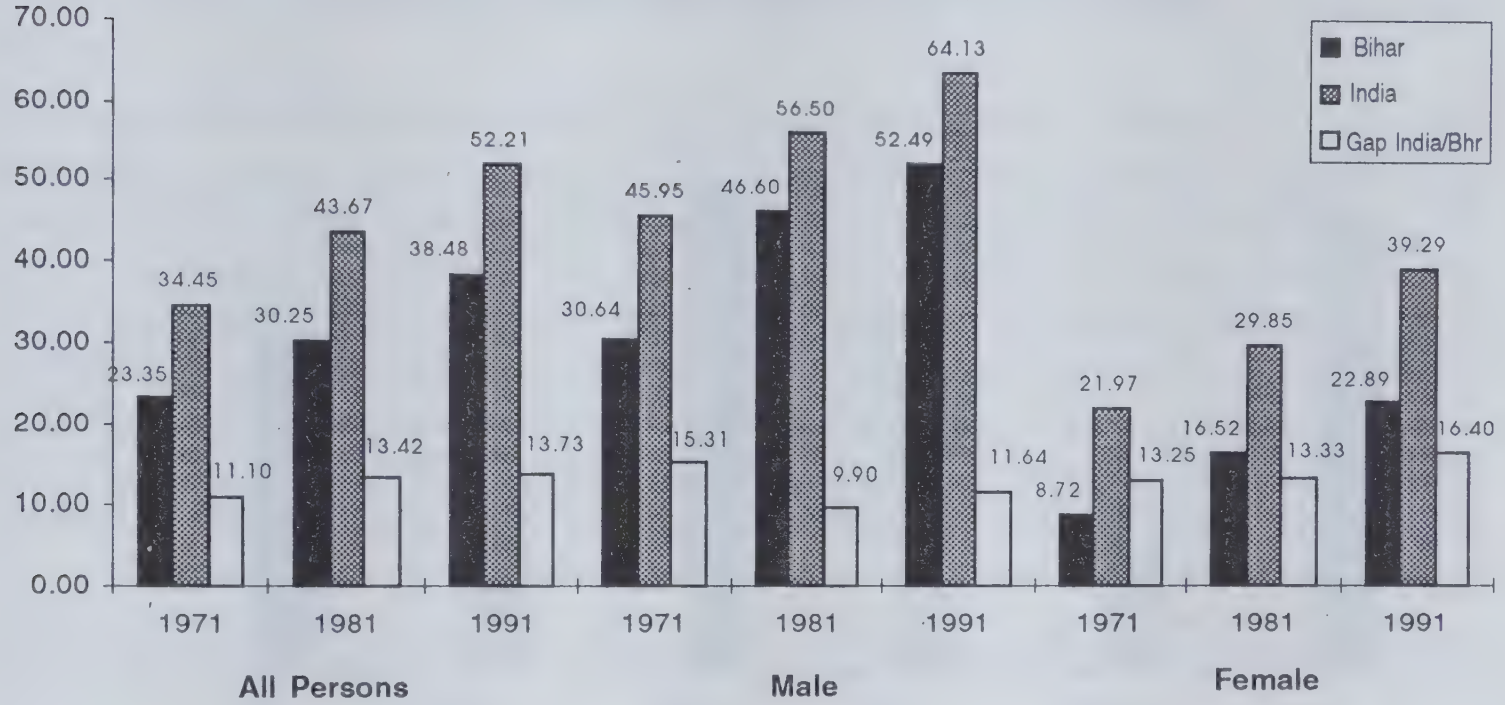
IV. EDUCATION

Literacy Levels in Bihar

Despite its well-known strong linkages to so many positive outcomes, literacy levels continue to be very low in Bihar compared to those for all-India, with women of the state carrying heavier burden of illiteracy to this day. Thus while male literacy rates have improved between 1971 and 1991 by 16 percentage points, from 30.6 per cent to 52.5 per cent, female literacy rates for the same period improved only by 14 points from 8.7% to 22.9 per cent. So the gap between male and female literacy rates widened instead of narrowing during those twenty years. While literacy among both SC and ST women was behind women in general, SC women had been lagging far behind in this respect. In 1991, literacy level of SC women of Bihar was only 7.1% as against 14.8 per cent among STs and 22.9% among all women of the state.

Table 14

Literacy by sex 1971-1991



Source: Census 1991.

School Enrolment

School enrolment gives on an idea of the progress a state is making to improve its literacy level. According to NFHS survey in 1993, only 51.3 per cent of the children aged at 6 to 14 were attending schools in Bihar, with the enrolment of female children only 38.3 per cent as against 63.6 per cent for male children. Clearly, the gender gap in school enrolment in Bihar continues to be extremely large. Interestingly, the position with regard to school enrolment and gender gap in the state's backward districts was found and to be not very different from that in the whole state. It is also noteworthy that the gender gap in school attendance was found somewhat

to be more pronounced in rural Bihar with 33.6 per cent of girls aged 6-14 attending school as against 59.8 per cent boys. In urban Bihar, 67.8 per cent of girls attended school compared to 84.3 per cent of boys.

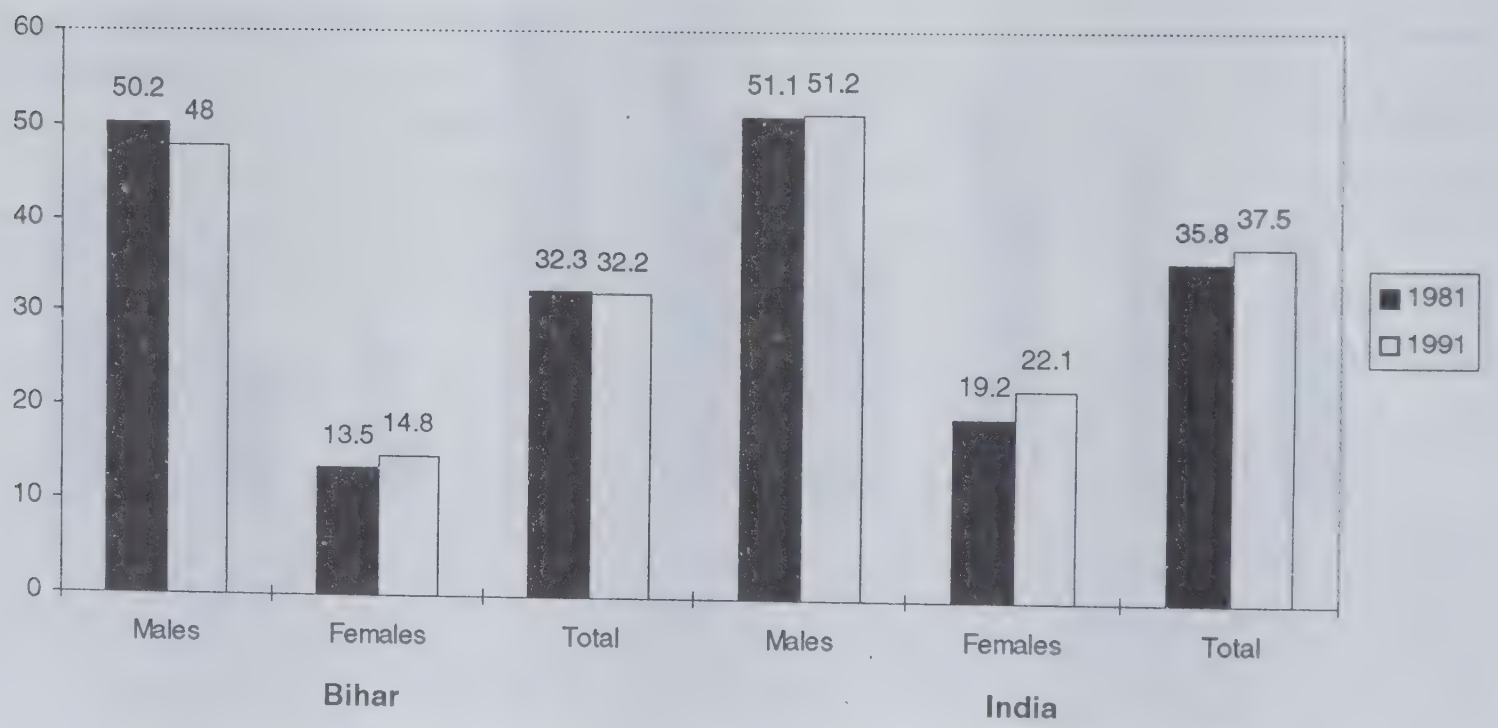
V. EMPLOYMENT

Work in Bihar

Given the age profile of Bihar's population, with persons aged 15-65 constituting 55.6 per cent of the population (as against 59.9 per cent for all India), it should be cause for no surprise if overall work participation in Bihar is somewhat lower than in the whole country. The work force in Bihar (including main and marginal workers) constituted 32.2 per cent of the population in 1991 whereas for the nation as a whole the corresponding percentage was 37.5 (see Table 15).

Table 15

Work Participation Rates for Males & Females (%)



Source: Census of India 1981 & 1991.

It can also be seen from the table that not only was female work participation in Bihar as considerably lower than male WPR in both 1981 and 1991 but also it was significantly smaller than that for whole of India. Among the major states in India, Bihar ranks third from the base with regard to low female WPR.

While female WPR for rural Bihar in 1991 was somewhat higher than for all-India (16.3 per cent against 14.8 per cent) it was still much lower than 22.3 per cent for the whole nation in 1991.

In rural areas of Bihar female WPR for SCs and STs was distinctly higher at 24.7 per cent and 39.3 per cent respectively. For non-SC/ST women separately the WPR was as low as 12 per cent.

An overwhelming proportion of workers (82 per cent) in Bihar is engaged in the primary sector, with the corresponding proportion for women being even higher (92 per cent). In the primary sector, 43 per cent of all workers were reported as cultivators and 37 per cent as agricultural labourers. As far as women are concerned, they were not only concentrated in the primary sector but also primarily as agricultural labourers. In 1981 (the year for which information is readily available), women engaged as agricultural labourers in Bihar outnumbered men. In contrast, for the whole country, there were 6 women engaged as agricultural labourers for every 10 men.

A disturbing aspect of the sectoral distribution in Bihar is the structure of employment has retrogressed even further in the sense of increasing dependence on the primary sector. The proportion of workers engaged in secondary sector comprising mining and manufacturing, has been on the decline over the past 30 years since 1961. Between 1961 and 1991, the percentage of main workers engaged in mining and manufacturing decline from 8.28 to 4.64 (Sharma 1995).

As for prevalence of unemployment, it is necessary to remember that in a predominantly agricultural economy, with the vast majority of the working people depending on livelihood on agriculture, the problem of unemployment shows itself up in the form of under-employment. Workers get work only for part of the year not all for working days but more because of the very seasonal nature of the agricultural operations. In Bihar, as was noted above, dependence on agricultural work for livelihood is the measure as for all the states in the country. In the circumstances, when unemployment surveys show the incidence of unemployment in Bihar is lower than in the whole country, (for 1987-88 unemployment by 'usual daily status' was 4.04% as against all-India ratio of 6.09% according to NSSO figures), one has to interpret the results with great caution. That the unemployment situation, taking into account both the days of employment and the wages a worker earns is quite bad in Bihar is borne out by the persistent incidence of poverty in the state on a scale far in excess of that in the whole country.

VI. POVERTY

Among the states, the incidence of poverty in Bihar has been rather acute. What is worse, the distance in poverty level between Bihar and the whole country has been widening over the years. According to the estimates of poverty made by the Planning Commission's Expert Group, between 1973-74 and 1987-88, while Bihar's proportion of rural people below the poverty line declined from 62.89 per cent to 52.65 per cent i.e., by 10.26 percentage points at the national level the decline was of 17.36 percentage points, from 53.37 per cent to 39.34 per cent (see Table 16). In rural Bihar, the incidence of poverty was always high and continues to be high. As per latest estimates for 1993-94, the rural poverty ratio for Bihar had risen to 57.97 per cent as against the decline for all-India to 37.52 per cent with the result that Bihar's rural poverty

ratio exceeds the all-India ratio by the maximum percentage points of 20.45 over the past 20 years.

It should be added that even in regard to urban poverty ratio Bihar has the dubious distinction of being the state with the ratio exceeding 50 per cent all through the recent years.

Table 16

Estimated Rural Poverty Ratio, Bihar and India

Years	Bihar			India		
	Overall	Rural	Urban	Overall	Rural	Urban
1973-74	61.78	62.69	51.75	54.93	56.44	41.23
1977-78	61.95	63.25	52.17	51.81	53.07	47.40
1983-84	62.51	64.37	50.42	44.76	45.61	42.15
1987-88	53.37	52.63	57.17	39.38	39.06	40.12
1993-94	-	57.97	-	-	37.52	-

Source: Chandrasekar and Sen, 1996. CMIE, 1996.

Housing

High incidence of poverty in Bihar has several other dimensions as well. According to estimates of housing shortage, Bihar ranks among the worst of major states with housing shortage of 33.27 per cent compared to the all-India figure of 12.30 per cent in 1991. While 9.48% of rural houses in the whole country had toilets, Bihar's proportion was even lower being only 4.96 per cent. Interestingly, the gap was much greater when one comes to electricity. Only 5.57% of the rural houses in Bihar had electricity in 1991 compared to 30.54 per cent of rural houses in the whole country. In regard to access to safe drinking water, however, rural Bihar had managed to do better than whole of rural India, with figures of 56.55 per cent and 54.55 per cent respectively [CMIE, 1996.]

CONCLUSION

To sum up, the state of Bihar has lagged behind the other states on most social and economic indicators. Firstly, there has been no evidence of the population growth slowing down. The proportion of the population below poverty line has not only been high but also virtually stagnant over the last two decades at a rather high level. Secondly, health status of women should be of particular concern, with persisting low sex ratios and high maternal mortality rates. Access to reproductive health care continues to be extremely inadequate, with the overwhelmingly high proportion of live births delivered at home and that too without professional help. Although, considerable progress has been made in Bihar in the establishment of primary health centres and sub-centres in rural areas, health care would also need much attention of policy makers. Low age at marriage and very low levels of school enrolment for girls make the life of the girl child rather bleak. Thirdly, literacy levels in Bihar have, no doubt been improving over the years but not enough. The gap with all-India is not narrowing, certainly not for women.

The literacy level among SC and ST women is particularly low, even more so among the former. With school enrolment in rural Bihar still extremely low, the gender gap in rural literacy level is likely to persist unless it is specially attended to.

Given the above scenario of the present day Bihar urgent steps to help expand facilities for the education and health care for women in rural areas and among SCs and STs are called for. ■

REFERENCES

Agarwal, Bina (1986), ***"Women, Poverty and Agricultural Growth in India,"*** The Journal of Peasant Studies, Vol 13, No 4, pp 165-220.

Bhat, Mari (1995), ***"Maternal Mortality Estimates,"*** Das Gupta et al. (eds.) Women's Health in India: Risk and Vulnerability, Oxford University Press, Oxford.

Chandrasekhar and Sen, Abhijith (1996), ***"On Statistical Truths, Economic Reform and Poverty,"*** Frontline, Feb 23, 1996, Madras.

Census of India 1981 (1981), ***"Special Reports and Tables based on 5 per cent Sample Data. Series 4, Part 2, Bihar,"*** Registrar General, New Delhi.

Census of India 1981 (1981), ***"A Portrait of the Population of Bihar,"*** Registrar General, New Delhi.

Census of India 1991 (1991), ***"Provisional Population Tables, Series 1, Paper 2 of 1992,"*** Registrar General, New Delhi.

Census of India 1991(1991), ***"Final Population Totals: Brief Analysis of Primary Census Abstract, Series 1, Paper 1,"*** Registrar General, New Delhi.

Central Bureau of Health Statistics (1990), ***"Health Statistics,"*** CBHS, New Delhi.

Centre for Monitoring Indian Economy (1992), ***"District Level Data for Key Economic Indicators,"*** CMIE, Bombay.

Centre for Monitoring Indian Economy (1991), ***"Basic Statistics Relating to the Indian Economy Vol. 2, States,"*** CMIE, Bombay.

Central Statistical Organisation (1992), ***"Selected Socio-economic Indicators,"*** CSO, New Delhi.

Deepti, Priya, Shaheeda, Tyab (1996), ***"Birthday Deathday,"*** Humanscape, January 1996, Bombay.

Duggal Ravi et al. (1995), ***"Health Expenditures across States,"*** Economic and Political Weekly, Special Statistics II, XXX. (16), p 901-908.

Economic and Political Weekly Research Foundation (1994), ***"Social Indicators of Development for India,"*** Economic and Political Weekly, Special Statistics II, XXIX. (21), p 1300-01, Bombay.

Government of India (1995), ***"Economic Survey"***, Ministry of Finance, Economic Division, New Delhi.

Government of India (1991), ***"Health Information of India, 1991,"*** Ministry of Health and Family Welfare, New Delhi.

Government of India (1992), ***"Rural Health Statistics in India, 1992,"*** Ministry of Health and Family Welfare, New Delhi.

Government of India (1992), ***"Bulletin on Rural Health Statistics in India, 1992,"*** Ministry of Health and Family Welfare, New Delhi.

Government of India (1992), ***"Family Welfare Year Book,"*** Ministry of Health and Family Welfare, New Delhi.

Gupta Tilak D. (1992), ***"Yadav ascendancy in Bihar politics,"*** Economic and Political Weekly, 27 (26): p 1304-06, Bombay.

Indu Bharati (1992), ***"Bihar's Bane; slow progress on land reform,"*** Economic and Political Weekly, 27 (13), p 628-30, 1992, Bombay.

Indu Bharati (1991), ***"Bihar's Dams, Tribals woes,"*** Economic and Political Weekly, XXVI, (22-23): P 1385-88, Bombay.

Indian Council for Medical Research, ICMR (1991), ***"Evaluation of Quality of Family Welfare Services at Primary Health Centre Level: An ICMR Task Force Study,"*** ICMR, New Delhi.

International Institute for Population Sciences (1992), ***"National Family Health Survey, Bihar Summary Report,"*** Bombay, IIPS.

International Institute for Population Sciences (1992), ***"National Family Health Survey, Madhya Pradesh Summary Report,"*** Bombay, IIPS.

Kulkarni, Sumathi (1994), ***"Dependence on Agricultural Employment,"*** Economic and Political Weekly, 29 (51-52) : p 3260 -3262.

Prabhu, K.S. and Chatterjee, Somnath (1993), ***"Social Sector Expenditures and Human Development: A Study of Indian States, Department of Economic Analysis and Policy,"*** Reserve Bank of India, Bombay.

Registrar General of India (1981), ***"Sample Registration System, 1981,"*** Vital Statistics Division, Ministry of Home Affairs. New Delhi.

Registrar General of India (1989), ***"Sample Registration System, 1989,"*** Vital Statistics Division, Ministry of Home Affairs. New Delhi.

Sharma, A.N. (1995), ***"Political economy of poverty in Bihar,"*** Economic and Political Weekly, XXX, (41 & 42), p 2587-2602, Bombay.

Shaukat Hassan (1995), ***"Environmental Scarcity, State Capacity and Civil Violence, the India Study,"*** Mimeo, American Academy of Arts and Sciences. Boston and the Peace and Conflict Studies Programme of the University of Toronto, Canada, 1995.

Shiva Kumar, A.K. (1995), ***"Women's Capabilities and Infant Mortality: Lessons from Manipur,"*** Das Gupta et al. (eds.) 'Women's Health in India: Risk and Vulnerability,' Oxford University Press, Oxford.

Tata Services Limited (1993), ***"Statistical Outline of India, 1992-93,"*** Department of Economics and Statistics, TSL, Bombay.

Tilak, JBG (1996), ***"How free is primary education in India,"*** Economic and Political Weekly, XXXI (6): p 355-66, Bombay.

Tyagi, P.N. (1994), ***"Education for all, A Graphic Presentation,"*** National Institute of Educational planning and Administration, New Delhi.

Uplekar, Mukund and Alex George (1994), ***"Access to Health Care in India,"*** Discussion Paper, UNDP, Series No. 12, CDS, Trivandrum.

Verma R.K. (1991), ***"Caste and Bihar Politics,"*** Economic and Political Weekly, XXVI, (18): p 1142-44, Bombay.

SECTION II

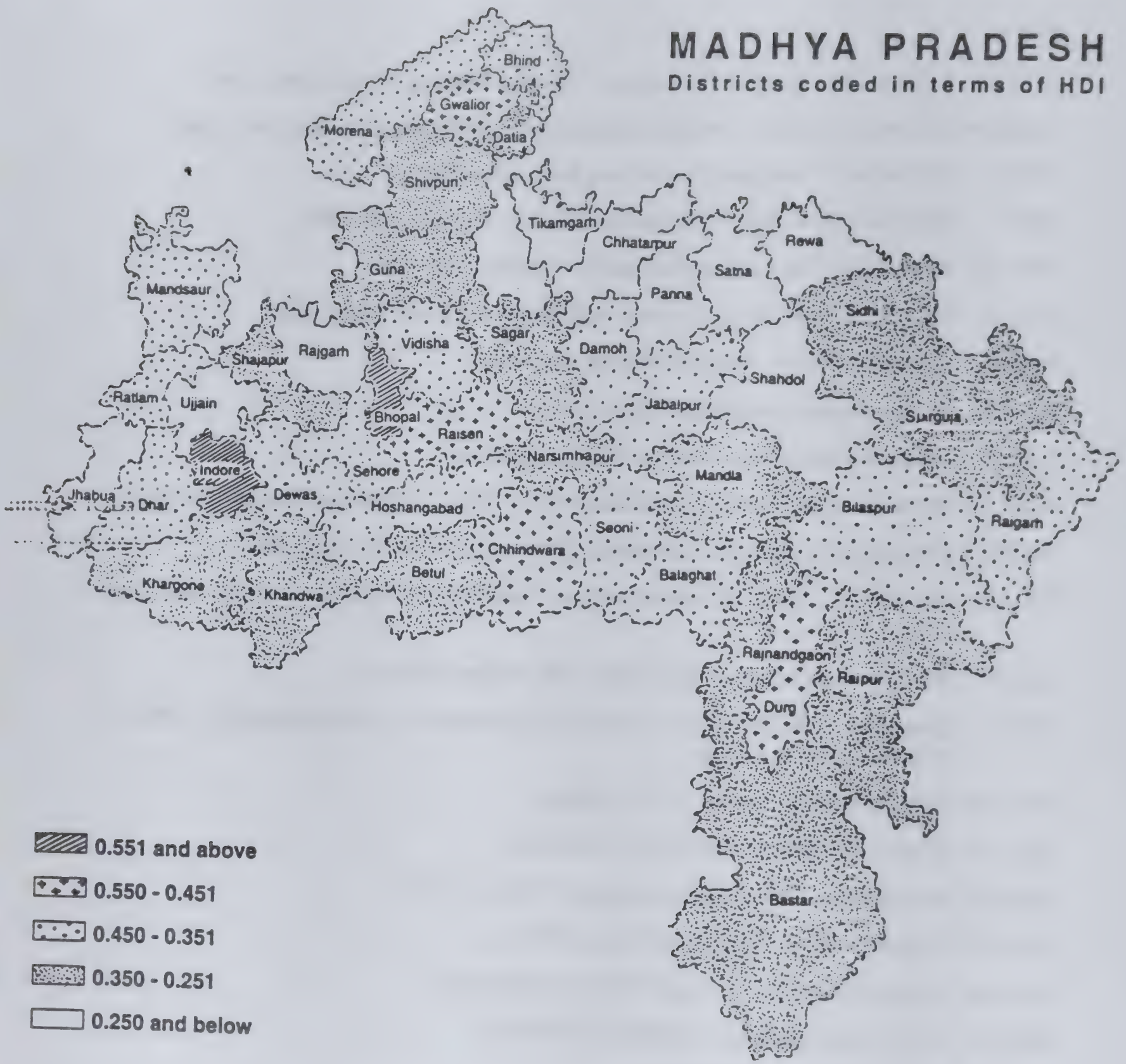
MADHYA PRADESH: A SOCIO-ECONOMIC PROFILE

LIST OF TABLES

MADHYA PRADESH

MADHYA PRADESH

Districts coded in terms of HDI



STATEMENT I

Basic Demographic Indicators of Madhya Pradesh & India, 1981-1992

Index		Madhya Pradesh	India
Population	(1991)	66,181,170	846,302,68
Per cent Population increase	(1981-91)	26.8	23.9
Density (Population/Km^2)		149	273
Per cent Urban	(1991)	23.2	26.1
Sex Ratio	(1991)	931	927
Per cent 0-14 Yrs old			
	1981	41.2	39.1
	1991	38.1	36.3
Per cent 65+ Yrs Old			
	1981	3.8	3.8
	1991	3.8	3.8
Per cent Scheduled Caste	(1991)	14.5	16.7
Per cent Scheduled Tribes	(1991)	23.3	8.0
Per cent Literate	(1991)[1]		
Male		58.4	64.1
Female		28.8	39.3
Total		44.2	52.2
Crude Birth Rate	(1992)	34.4	29.2
Crude Death Rate	(1992)	12.7	10.1
Exponential Growth Rate	(1981-91)	2.38	2.14
Total Fertility Rate	(1991)	4.6	3.6
Infant Mortality Rate		104	79
Life Expectancy	(1986-90)		
Male		56.2	57.7
Female		54.7	58.1
Couple Protection Rate	(1992)	38.8	43.5

Source: Office of the Registrar General (1992,1993a, 1994a, & 1994b); Office of the Registrar General and Census Commissioner (1987); Ministry of Health and Family Welfare (1991-92).

Note: Based on the population age 7 and above.

STATEMENT II

Trends in Basic Demographic Indicators, Madhya Pradesh 1971-1991

Indicators	1971	1981	1991
Population	41,654,119	52,178,844	66,181,170
Per cent Population increase (previous decade)	28.7	25.3	26.8
Density (population/KM^2)	94	118	149
Per cent Urban	16.3	20.3	23.2
Sex Ratio	941	941	961
Per cent 0-14 Yrs old	43.7	41.2	38.1
Per cent 65+ Yrs old	3.2	3.8	3.8
Per cent Scheduled Castes	13.1	14.1	14.5
Per cent Scheduled Tribes	20.1	23.0	23.3
Per cent Literate			
Male	32.7	39.5	58.4
Female	10.9	15.5	28.8
Total	22.1	27.9	44.2
Crude Birth Rate	39.1	37.6	34.4[b]
Crude Death Rate	15.6	16.6	12.7[b]
Exponential Growth Rate	2.52	2.25	2.38
Total Fertility Rate	5.6	5.2	4.6
Infant Mortality Rate	135	142	104[b]
Life Expectancy Rate			
Male	U	53.2[c]	56.2[d]
Female	U	51.5[c]	54.7[d]
Couple Protection Rate	9.9	21.5	38.8[e]

a: Based on the population age 5 & above for 1971 & 1981 and population age 7 and above for 1991.

b: 1992, provisional.

c: 1981 - 86.

d: 1986 - 91.

e: 1992.

Source: Office of the Registrar General (1982, 1985, 1992, 1993a, 1994a, 1994b); Office of the Registrar General & Census Commissioner (1974, 1976, 1984b,1987); Ministry of Health and Family Welfare (1989, 1991,1992).

Note: U: Not available

MADHYA PRADESH - A PROFILE

I. ORIENTATION

Madhya Pradesh is the largest Indian state in terms of its land area. It is spread over 13.49 per cent of the total geographic area of the country and accounts for 7.62% of the country's population. The state's population stood at 66.2 million in 1991, making it sixth among the states in population.

Geographical Features

The present state of Madhya Pradesh came into existence in 1956 as a result of the reorganisation of Indian states on a linguistic basis. At that time, five adjoining regions were consolidated into one region, namely the already existing 17 districts of the then Madhya Pradesh, and the regions of Madhya Bharat, Vindhya Pradesh, whole of Bhopal and parts of Rajasthan. Situated in the heart of the country and surrounded by seven states it is a sparsely populated state. One-third of its total area is covered with forest. Compared to the national figure of 21.9 per cent Madhya Pradesh has 31,2 per cent under forest cover. One-eighth of India's forest land is in this state. An "undulating topography characterised by low hills, narrow valleys, plateaus and plains is the general physiography of the state which separates the fertile, Gangetic plains of Uttar Pradesh in the north from the broad table land of the Deccan Plateau". (Director of Census Operations, Madhya Pradesh, 1990). On the one hand, the state contains the high altitude Saptura mountains (1350 metres) and on the other, the low level ravines of Chambal valley (150 metres).

Madhya Pradesh is a land of ancient culture. Archaeological monuments such as Khajuraho near Chattarpur, Udayagiri caves near Vidisha and Maheshwara Temple near Khargone are some examples of a cultural heritage going back to the civilisations of Mohanjo-Daro and Harappa. The famous Sanchi Stupa near Vidisha where Lord Buddha's ashes are buried is a place of pilgrimage for people from all over the world.

The state is divided into 12 administrative divisions, 45 districts, 317 tahsils and 459 development blocks. The districts are very uneven in terms of their geographic size. The largest district is 19 times bigger than the smallest district. The average population of a district in the state is 1.5 million (See the Map on Madhya Pradesh Districts coded in terms of HDI).

The Economy

The economy of the state is predominantly agricultural with 77 per cent of its population living in rural areas and the agricultural sector accounting for 41 per cent of the total state income. Wheat, rice, jowar, bajra, sugarcane, maize, and cotton are the major agricultural products of the state. The state is self-sufficient in foodgrains. In 1986-87 the state had only 17.5 per cent of cultivated area under irrigation, far behind the national average of 30.7 per cent in the same year. The use of fertiliser is also poor in the state, further weakening its agricultural sector. In

1989-90, compared to a national average of 66.9 kilogram use of fertiliser per hectare, Madhya Pradesh stood twelfth among 15 major states, with 29.7 kilogram of fertilisers used per hectare. Apart from gram and groundnut, in all other major crops the state lacks behind other states and all-India average in productivity per hectare. Industrially, the state is less developed when compared with some other states of India. The per capita income of the state at Rs. 4021 in 1990-91 was less than the national average of Rs. 4974 by 19 per cent. From a mere 12 per cent in 1951, the state's urban population has risen in the recent years to 23.3 per cent in 1991, bringing the level of the state's urbanisation close to the national average of 25.7 per cent. The main urban centres of the state are located along the rivers and mining centres.

Although predominantly one religion state, with 93 per cent of its population belonging to Hindu religion, it has a very high concentration of scheduled caste (SC) and scheduled tribe (ST) population. Virtually two-fifths of the population consist of these deprived groups as compared to India's one-fourth. According to 1991 census, while the scheduled caste in the state constituted 14.5 per cent of the state's population, the scheduled tribe population was as high as 23.3 per cent. In fact the state has the largest concentration of scheduled tribe population in the country. The tribes form only 8% of the population for the whole country. In districts where the tribes concentrate, they constitute 50 per cent and even more of the population. The population growth rate for the scheduled population has been higher than that of the general population.

II. DEMOGRAPHIC SCENE

Madhya Pradesh is among the least densely populated states in India. Its density of 149 per sq.km, is considerably less than 257 per sq.km, for the whole country, but there are large variations in the density pattern within the state. The river valleys have relatively greater concentration of population as they are more fertile and conducive for human settlement. The hills and forests are rather sparsely populated. In 42 tahsils the population density is below 100, showing a low concentration of population. These are the hilly and forested regions of north-eastern and north-western parts of the state.

As can be seen from Table 1 population growth in Madhya Pradesh has been rather uneven. The decadal variation in the state's population has gone up from 15.30 per cent in 1901-1911 to 26.75 per cent in 1981-91.

While there were ups and downs in population growth upto 1961, the state has consistently registered a high population growth rate in every decade since 1961, a rate that has exceeded that for the whole country. In the latest decade of 1981-91, while the all-India population growth rate fell from 25 per cent in 1971-81 to 23.5 per cent, Madhya Pradesh's population growth rate rose from 25.27 per cent to 26.75 per cent, a development that cannot be overlooked for a very low income state.

Table 1

Population of Madhya Pradesh and India 1901-1991

Years	Madhya Pradesh		India	
	Population in million	%decade variation	Population in million	% decade variation
1901	16.8	-	238	-
1911	19.4	+15.30	252	+5.75
1921	19.1	-1.38	251	-0.31
1931	21.3	+11.39	278	+11.00
1941	23.9	+12.34	318	+14.22
1951	26.0	+8.67	361	+13.31
1961	32.3	+24.17	439	+21.51
1971	41.6	+28.67	548	+24.80
1981	52.2	+25.27	685	+25.00
1991	66.1	+26.75	846	+23.50

Source: Census of India, 1901-1991.

High Birth Rate

Fertility of a population depends on the birth performance and is measured as the frequency of births in a population. The rural birth rate in Madhya Pradesh has been rather high (see Table 2 and 2a). It was 39.1 per 1000 in 1971 and 37.3 in 1991, a decline no doubt, but only marginal. For rural Madhya Pradesh, the birth rate was as high as 39.6 per 1000. In 1981-83 it stood at 39.6 per 1000 and had declined only by 2 points in 1990-92. It is noteworthy that the gap in rural birth rate between Madhya Pradesh and all-India increased from 4 percentage points in 1981-83 to 6.3 points in 1990-92. Thus right through the decade of the eighties the rural birth rate in the state was higher than the high national average.

Table 2

Estimated Birth Rate for India and Madhya Pradesh.

Estimated Birth Rate						
	India			Madhya Pradesh		
1981	33.9	35.6	27	37.6	38.8	31.4
1982	33.8	35.5	27.6	38.5	39.9	32.4
1983	33.7	35.3	28.3	38.5	40.1	32
1984	33.9	35.3	29.4	36.9	38.1	32.2
1985	32.9	34.3	28.1	39.4	41	33
1986	32.6	34.2	27.1	37.2	39	30.1
1987	32.2	33.7	27.4	36.4	37.5	31.9
1988	31.5	33.1	26.3	37	38.4	31.2
1989	30.6	32.2	25.2	35.5	36.7	30.3
1990	30.2	31.7	24.7	37.1	38.9	29.3
1991	29.5	30.9	24.3	35.8	37.3	29.7
1992	29.2	30.9	23.1	34.9	36.8	26.5
1993	28.5	30.3	23.5	33.4	35.9	24.3

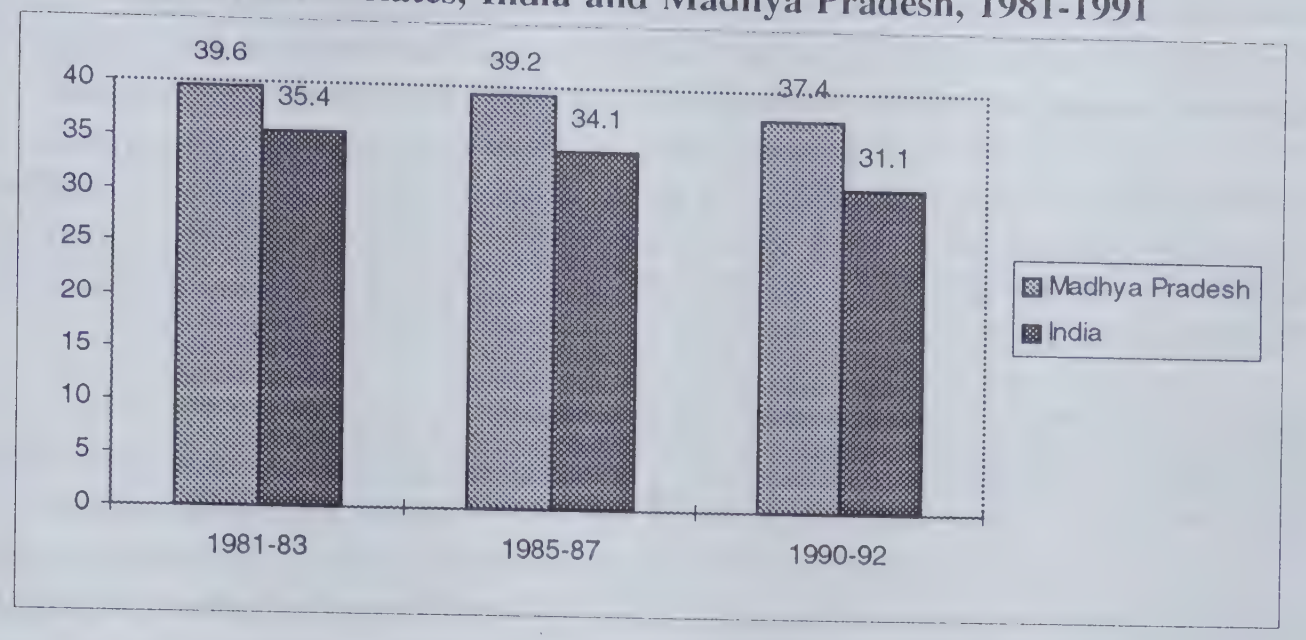
Source: Sample Registration Bulletin, January 1995, Vol. XXIX, No. 1, RGI. cited in Madhya Pradesh Human Development Report, 1995.

Birth rates are births per 1,000 population.

A high birth rate is usually associated with high total fertility rate, (TFR) which is defined as the average number of children born to a woman through her child bearing years. TFR of 4.6 in Madhya Pradesh is much higher than the corresponding rate of 3.6 for the whole country. Though high TFR is in Madhya Pradesh, it should not go unremarked that during the period 1971 to 1991 it declined by one child, from 5.6 to 4.6. High fertility rates in a state are closely related to the age at marriage and are also linked to the knowledge of and access to contraceptives the population has, which is usually a function of state policy.

Table 2a

Rural Birth Rates, India and Madhya Pradesh, 1981-1991



Source: Sample Registration Bulletin, January 1994 (Vol. XXVIII, No. 1).

Low Age at Marriage

On the age at which women marry depends not only on the total fertility rate but also health conditions especially of women and children. At the most fundamental level, immature women's bodies are not able to tolerate the rigors of child bearing and as a result are subject to higher risks of maternal and infant deaths.

The minimum legal age at marriage in India is 18 years for girls. In Madhya Pradesh the average age at marriage of women was lower at 17.4 in 1992. Detailed analysis shows that by age 15-19 nearly 64 per cent of the women in the state had been married. This percentage was higher at 73 per cent for rural areas. What is even worse, for one-fifth of the married women in the age group 15-19 the age at marriage was less than 13 years. In the rural areas of the state 45 per cent of the women aged 15-19 years were married by age 15 in 1991. Among the state's SC population the position is much more alarming in that 50 per cent of women are married by age 13.

Couple Protection Rate

A rather interesting situation is existing in the state in regard to contraceptive use. The percentage of couples effectively protected by various methods of contraceptive use and family planning in Madhya Pradesh is reported to have increased significantly over the past 20 years. It increased from 10% in 1971 to 21.5 per cent in 1981 and to 39 per cent in 1992. In 1994, the rate is reported to have increased further to 44 per cent which is a little higher than the corresponding national rate of 43.5 per cent. Obviously this major breakthrough in the coverage of the couple protection rate has had only marginal impact on TFR in the state. It remains to be examined why inspite of such high couple protection rate TFR has yet to come down in the state and what, if any, additional measures are called for to complement the coverage of the couple protection rate.

Life Expectancy

Sex differences in mortality are of considerable social importance. They provide indirectly an excellent measure of the relative value placed upon men and women in a society. Female biological advantage is a universal phenomenon. Where however men outnumber women important social forces are bound to be at work in terms of differential life expectancies. The expectation of life at birth is the number of years on the average a person could expect to live. High mortality societies have short expectation of life usually as a result of poor nutrition, health, and other social factors. In societies where life expectancy of women tends to be lesser than that of men, these factors must be impinging more on women than men.

Average life expectancy in Madhya Pradesh in 1981-91 was 55.5 years, lower by 3.4 years in comparison to all-India life expectancy. Female life expectancy in the state was lower than male by more than a year and a half. Still, it should not go unremarked that life expectancy, female as well as male, in the state has been increasing with declining death rates, which came down from 16.6 in 1981 to 12.9 in 1992 and 12.6 in 1993 (see Table 2). The death rates at the national level has come down even more sharply.

Table 3

Estimated Death Rate for India and Madhya Pradesh

Years	Estimated Death Rate					
	India			Madhya Pradesh		
	All	Rural	Urban	All	Rural	Urban
1981	12.5	13.7	7.8	16.6	18	9.3
1982	11.9	13.1	7.4	14.9	16.3	9
1983	11.9	13.1	7.9	14.5	15.9	8.7
1984	12.6	13.8	8.6	14.2	15.5	9
1985	11.8	13	7.8	14.2	15.3	9.4
1986	11.1	12.2	7.6	13.6	14.8	8.8
1987	10.9	12	7.4	13.3	14.6	8
1988	11	12	7.7	14.3	15.4	9.8
1989	10.3	11.1	7.2	12.9	13.9	8.6
1990	9.7	10.5	6.8	12.6	13.7	7.6
1991	9.8	10.6	7.1	13.8	14.9	9.2
1992	10.1	10.9	7	12.9	13.9	8.5
1993	9.2	10.5	5.7	12.6	13.9	7.6

Source: Sample Registration Bulletin, January 1995, Vol. XXIX, No. 1, RGI. cited in Madhya Pradesh Human Development Report, 1995.

Death rates are deaths per 1,000 population.

The gap between female life expectancy at the national level and that in the state is at 4.4 years compared to the gap of 2 years in male life expectancy (See Statement I). For the whole country, female life expectancy is now higher than male by one year. In Madhya Pradesh however female life expectancy is still lower by 2.1 years (1991) than male life expectancy.

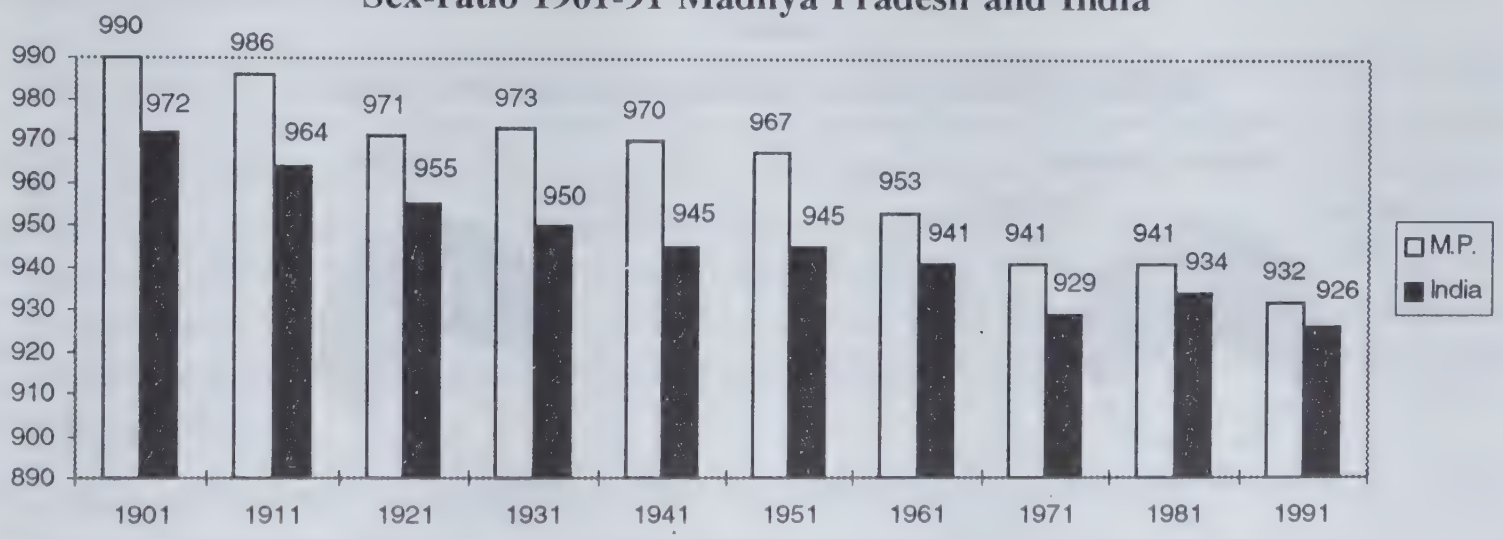
Sex Ratio

Sex ratio shows the general demographic balance between men and women. An imbalance in the sex ratio gives an indication of discrimination if one adjusts for migration. In a state where the sex ratio is unfavourable to women, we can generally assume that the status of women is very low. In Madhya Pradesh, as in the whole country, sex ratio has been unfavourable to women, practically all through the 20th century. The sad part of the story, however, is that the ratio has become more unfavourable over the years. As can be seen from Table 3, there were 990 women to 1000 men in Madhya Pradesh (for all-India the ratio was 972 to 1000) in 1901. The ratio for the state in 1991 is 932 as against 929 for all-India. Clearly, the deterioration reflected in the declining sex ratio has been greater in Madhya Pradesh over the years. It would appear that women in Madhya Pradesh, as in whole of India, have been at a continuously increasing disadvantage.

There is, however, a significant regional variation in sex ratio among the districts of the states. Very broadly, the state can be divided into two parts along the Maikal-Satpura range and the Narmada valley as far as women's survival is concerned. The area of low sex ratio lies to the north of this divide and a better situation of female survival lies to the south. Districts in the north, in the Gwalior and Chambal regions, have very low sex ratios. Bhind is the lowest with a gender ratio of 816, followed by Morena 826, Gwalior 833, Datia 847 and Shivapuri 849. In all, 15 districts have a gender ratio below 900. A further analysis shows that most of the districts in the state have experienced this decline.

Table 4

Sex-ratio 1901-91 Madhya Pradesh and India



Source: Census of India, 1991.

The sex ratio is the ratio of the number of one sex to the other. The Indian census measures the number of females to males. The sex ratio is the ratio of women to the number of 1,000 men.

In 37 of the 45 districts between 1971 and 1981 the sex ratio has declined. In 1981, there were 11 districts in which the sex ratio was far below 900 but above 800. Only eight out of 45 districts had a sex ratio which reflected a larger proportion of women than of men. These are the districts of Chattisgarh region forming a continuous belt [MHDR, 1995]

As can be seen from Table 4a, better ratio prevails however among the state's tribal population. While amongst STs the ratio was 985, amongst the SCs it was 915 and amongst non-SC and non-ST it was 916, almost the same as for SCs.

Table 4a

Gender Ratios in Madhya Pradesh - 1991

	All	Scheduled Castes	Scheduled Tribes	Others
Rural	943	919	989	927
Urban	893	900	902	891
Total	931	915	985	916

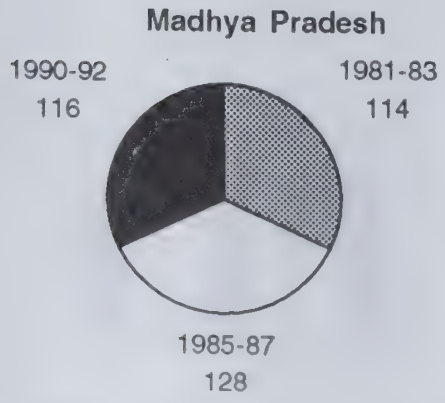
Source: Primary Census Abstract, 1991.

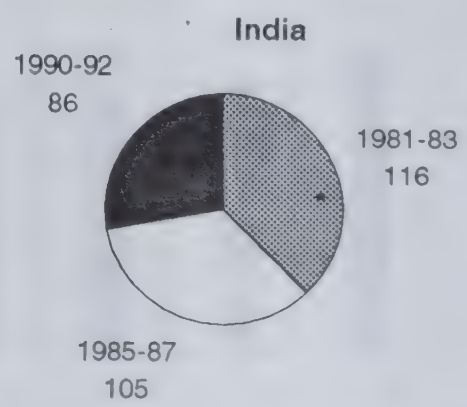
Infant Mortality Rate

Note was taken above of the decline in overall death rate in the state. This was in line with the trend in the whole country. Unfortunately, this trend in overall mortality rate is not reflected in infant mortality rate (IMR). While, between 1981-83 and 1990-92, IMR for the whole country declined from 116 to 86 per 1000 live births that for Madhya Pradesh increased from 114 to 116. (SRS Bulletin, Jan, 1994). According to a 1992 Survey, the incidence of infant mortality was higher among SC/ST population in Madhya Pradesh. The differential was considerably higher for SCs than STs. Also in the rural parts of the states, in its backward districts, IMR was found to be much higher (almost double) than in the urban parts (NFHS 1992).

Table 5

Infant Mortality Rate: Madhya Pradesh and India





Source: EPW Special Statistics, no. 8, 1994, SRS Bulletin, 1994.

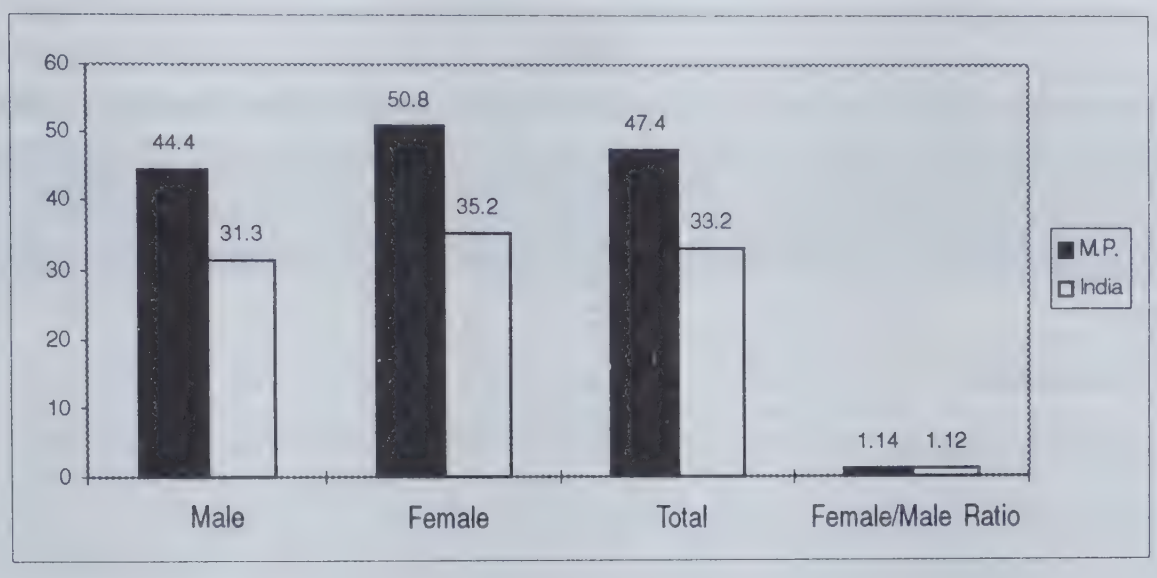
The infant mortality rate is the ratio of infant deaths of children under one year of age registered in a given year to the total number of live births registered in the same year.

Distinction is often made in studies on the incidence of mortality between mortality of infants i.e. before they complete one year of age and mortality of children i.e. between age 1 to 4. The incidence of death of children between 1 to 4 is also much higher at 47.4 compared to all India average of 33.2 per cent.

As regards gender differential in the incidence of mortality in Madhya Pradesh the position of female children according to available information is a little worse in the state than in the whole country. This is more so in rural Madhya Pradesh than in its urban centre.

Table 5a

Estimated Age - Specific Death Rates in 0-4 years for Madhya Pradesh and India



Source: SRS, 1989.
Sample Registration Bulletin - 1989 - Registrar General of India, Vital Statistics Division, New Delhi.

Maternal Mortality Rates (MMR)

Child birth anywhere in the world has its risks, particularly without proper pre-natal and post-natal care and attention during delivery. For most women in rural areas the risks are multiplied. Maternal mortality is an important index of a community's commitment to women's health care. Maternity-related deaths are among the leading causes of death for women in the reproductive age group in India. Adequate pre-natal and birth care could prevent most of the deaths that now occur. Maternal mortality statistics are difficult to come by as they are usually not collected and if collected they are not reported. We have to rely therefore on estimates attempted by experts from time to time.

In Madhya Pradesh it is estimated that 535 maternal deaths occur for every 100,000 live births. Though lower than the national average it is still unacceptably high. Some of the important factors contributing to the high MMR could be (a) the low age at marriage (b) lack of institutional help for birth care and (c) low level of education of the women in the state.

Information on the access to institutional care that women in the state have can be seen in Table 6.

Births Attended

Among several others one important reason contributing to the very high MMR in Madhya Pradesh could be that only 4.10% of the births in rural areas take place under institutional care. Virtually, 84 per cent of the births are in the hands of untrained professionals. The urban figures are better, but even here the proportion of births outside the institutional care is high. While it is true even in the country as a whole 65 per cent of the rural births are taking place with the help of untrained professionals the situation in rural Madhya Pradesh is the worst among the states.

Table 6

Percentage Distribution of Attended Births in Madhya Pradesh 1989

	Madhya Pradesh			India		
Index	**Rural**	**Urban**	**Total**	**Rural**	**Urban**	**Total**
Institutional	4.10	48.90	11.50	15.20	51.00	21.80
Trained Professionals	12.00	16.20	12.90	19.30	25.70	20.50
Untrained Professional	83.90	34.90	75.80	65.50	23.30	57.50

Source: SRS 1989 cited in Uplekar & George, 1994.

III. HEALTH CARE

Health Care and Access

Given such high rates of every index of mortality in Madhya Pradesh, we need to examine the availability of health care in the state. In most of the states, the extreme concentration of health services in urban areas and very sparsely distributed rural services make sheer access to health services of prime concern. Of course, in addition to physical access social access is also important. Here gender, class, caste and education all play an important role. In the rural areas the SCs and STs face formidable barriers to access to health care services. Besides, there are cultural factors like belief, conventions and ideas about health, which further complicate the situation.

Since independence there has been considerable extension of curative and preventive health care to the rural areas of all the states through the network of hospitals, dispensaries, and primary health centers (PHCs) and sub-centres. The PHCs are staffed by one to three doctors supported by auxiliary medical and nursing staff.

A comparison can be made of the rural public health infrastructure available in Madhya Pradesh with that for the whole country from the data presented in Table 6. The availability of a PHC

or sub-centre for every one lakh of population in Madhya Pradesh is somewhat better than in the whole country, 25.78 as against 24.45. However the maximum radial distance covered by a PHC is nearly 11 km, and by a sub-centre 3.4 kms in Madhya Pradesh as compared with 7 kms and 2.76 kms respectively for all India. According to the 1992 survey, referred to above, three-fourths of the villages in the state are 10 or more kms from the nearest PHC. With only 23 per cent of the villages in the state are connected through all-weather roads, physical access for the rest of the rural population of the state is itself quite problematic.

Availability of health care facilities is often measured also on the basis of indices like population-doctor and bed-population ratio. While there were 16 doctors per one lakh of population in Madhya Pradesh, for the whole country the number of doctors per one lakh of population was 43. As regards availability of hospital beds in the state, there were 38 beds per one lakh of population compared to more than double the number, i.e. 79 for all India. In this respect, the situation in Madhya Pradesh should be of particular concern since less than 10 per cent of the beds are available in rural areas with hospitals concentrated in urban areas. Table 7 also gives the growth of health infrastructure and facilities during the period 1961-91, in Madhya Pradesh and all-India. Except for the number of nurses per one lakh of population, the state lags woefully behind in every other respect the all-India position in regard to health infrastructure and facilities.

Table 7

Growth of Health Infrastructure and Facilities in Madhya Pradesh and India 1961-91.

	Madhya Pradesh				India			
	1961	1971	1981	1991	1961	1971	1981	1991
No of Hospitals per lakh of population	0.53	0.40	0.53	0.61	0.70	0.81	0.99	1.32
No of Dispensaries per lakh of population	1.36	0.93	1.23	0.42	2.14	2.22	2.45	3.25
No of PHCs per lakh of population	0.74	1.28	1.14	2.33	0.75	1.17	1.06	3.55
No of sub-centres per lakh of population	-	6.88	12.81	23.45	-	6.36	9.74	20.90
No of beds per lakh of population	30.75	36.70	32.24	38.27	52.28	63.60	73.64	78.70
No of doctors per lakh of population	-	11.53	8.07	16.92	-	27.57	39.22	47.19
No of nurses per lakh of population	5.54	9.55	15.50	88.00	8.10	14.71	21.95	38.88

Source: Uplekar & George, 1994.

Expansion of health infrastructure and facilities has to be an area of immediate priority action in the state. Not only is the doctor-population in the state very low but further, there are no doctors in one-fifth of the state's PHCs. The number itself of PHCs is less here than in the country as a whole. Naturally, the question arises as to the quantum of health expenditure, particularly that incurred by the state government because on that depends very largely the extent of health infrastructure and facilities in the state.

Health Care Expenditure

Total health care expenditure consists of government expenditure on health institutions and household expenditure on health care. An idea of the government expenditure on public health services could be obtained from the expenditure figures provided in the Annual Government Budget. Per capita government expenditure on health incurred in Madhya Pradesh almost quadrupled in current prices between 1980-81 and 1992-93, from Rs 13.18 to Rs 48.33. Still, it was lower than the corresponding all-India figure of Rs 70.15 in 1992-93. As a proportion of total revenue account expenditure of the state government, health expenditure declined from 6.77% to 5.48% during this period. If the share of health expenditure had not been allowed to decline, per capita health expenditure in the state would have been higher at Rs. 59.71, instead of Rs. 48.33 [MPHDR, 1995].

With the government health expenditure rather low and public sector facilities not sufficiently accessible, it should be a matter of no surprise if the people of the state, particularly those in the rural areas, have to meet a lot of health expenditure from their own pockets and also rely on private sector health facilities. According to the 1992 survey, already referred to, per capita household expenditure in the state on health was Rs. 29 which is six times per capita government expenditure on health.

Appendix 1

Rural Public Health Infrastructure in Madhya Pradesh and India 1992

Index	Madhya Pradesh	India
Average Rural Population served by Sub Centre	4264	4795
Average Rural Population served by PHCs	42967	30083
Average rural Population served by CHC (in lakhs)	2.90	3.04
Maximum radial distance covered by a Sub Centre (in km)	3.42	2.76
Maximum radial distance covered by a PHC (in kms)	10.87	6.92
Maximum radial distance covered by a CHC(in Kms)	28.23	22.03

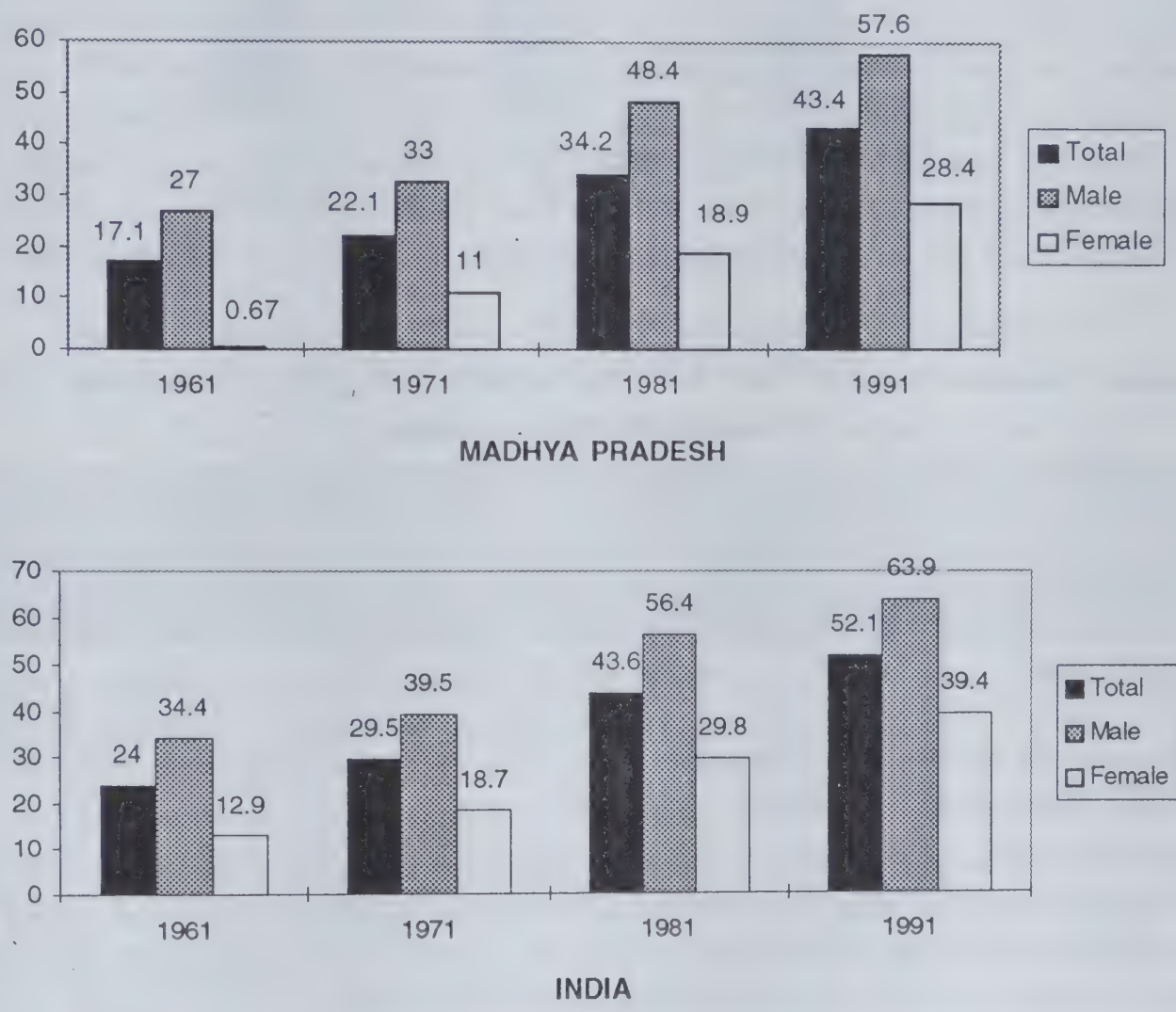
Source: Bulletin on Rural Health Statistics in India, September 1991 and MHFW, GOI, New Delhi, pp 50-51. Cited in Uplekar M. & George A., UNDP, 1994.

IV. LITERACY

The literacy level in India itself is still quite low. Only in 1991, i.e after almost 45 years of Independence, had the literacy level crossed the midpoint and reached 52 per cent. Women's literacy level was still lagging far behind, being only 39 per cent compared to male literacy of 64 per cent. In 1961, the overall literacy level in Madhya Pradesh was slightly better than for the country as a whole. In the last three decades, while there has been improvement in the national average, the literacy level have moved rather slowly in the state. In Madhya Pradesh the situation was far worse in regard to female literacy as well overall literacy. In 1991 female literacy stood at 28.4 per cent and male literacy at 57.6 per cent (see Table 8).

Table 8

Male, Female Literacy Rate, 1961-1991 - Madhya Pradesh



Source: Family Welfare Year Book, 1991, CMIE, 1991. EPW, Special Statistics-8, 1994.
Note: Data relates to the population aged seven years and above.

It is also important to note that the gender gap in literacy of close to 30 percentage points has not narrowed between 1981 and 1991, though there is improvement in the overall literacy percentage in the state from 34.2 to 43.4 during the period. Of even greater concern is the

literacy situation in rural areas and among females and socially vulnerable groups like the SC/ ST. Thus in 1981 while the literacy rate for the whole population in the state was 34.2 per cent it was 21 per cent in rural areas and 19 per cent for SCs and 11 per cent for STs (in the case of SC/ST 0-6 age group population is also included in the calculation). The female literacy rate of SCs in 1981 was 7 per cent and STs is only 4%.

Education and the Gender Gaps

It is also noteworthy that there are some districts of Madhya Pradesh, which lag particularly behind in the matter of female literacy. Lowest female literacy is found in the districts of Rajgarh, Bastar, Surguja, Jhanbus, Sidhi and Shivpuri. Most of these are districts with ST concentration.

Female-male gap in literacy levels is a result of the disparity in school enrolment levels. Interestingly, as can be seen from Table 9, there is not much difference between Madhya Pradesh and all-India, in regard to the ratio of girls at age 6-11 enrolled in primary schools. In fact, the gender gap between boys and girls at this stage of schooling is larger for all-India than Madhya Pradesh (28.52 per cent against 20.40 per cent). It is at the secondary stage that the position with regard to the gender gap gets reversed. In Madhya Pradesh 64 per cent of girls in age group of 11 to 14 are not in secondary schools as against 53 per cent for the whole country.

Table 9

Enrolment Ratio in Class I-V & VI-VIII of schools for general education, 1991-92, Madhya Pradesh & India

	Classes I-V (6-11 yrs)			Classes VI-VIII (11-14 yrs)		
	Boys	Girls	Total	Boys	Girls	Total
Madhya Pradesh	119.20	88.79	104.54	74.22	35.68	55.53
India	116.61	88.09	102.74	74.19	47.40	61.15

Source: Family Welfare Year Book, 1994.

Statistics of school enrolment tend to overestimate the number of students for two reasons. First, the official statistics relate to numbers on roll and not numbers actually attending school. Secondly students enrolled in schools do not all come from the age group to which they are supposed to belong. Due to these reasons some of the enrolment ratios exceed 100. Even according to these statistics, 12 per cent of the girls of primary school-age and two-thirds of the girls in the secondary school-age in the state are not attending schools. At the national level a higher percentage of girls are seen attending school especially in the secondary schools.

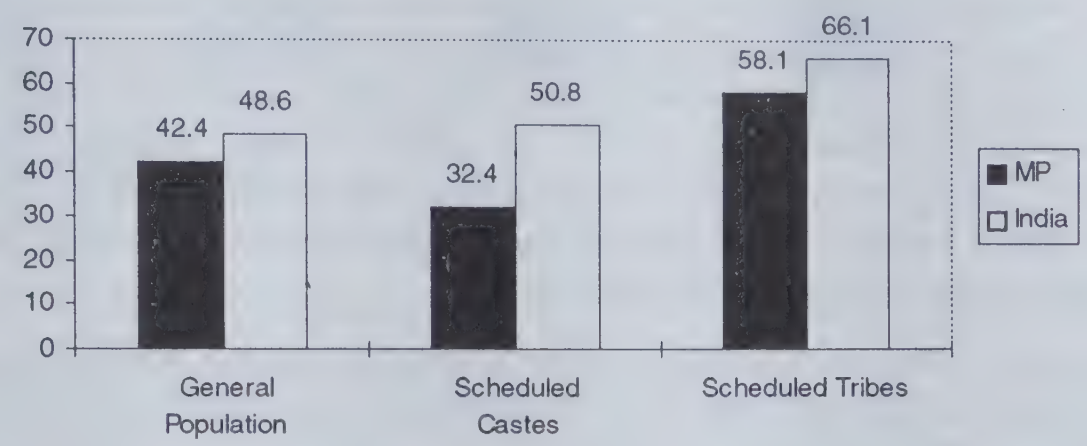
School Drop Outs

Information is available in regard to the drop-out rates for the year 1986-87 in classes I to V for various states. On the basis of this information it appears that for the general population the

proportion of students dropping out and not completing primary school, though substantial, is somewhat lower in Madhya Pradesh than in India. However, it is very noteworthy that the drop-out rates for SCs in Madhya Pradesh is distinctly lower than for the general population, though the reverse is the case for STs. Still both STs and SCs seem to do better in this regard than in the case for the whole of India.

Table 10

Drop-out Rates - Classes I to V, 1986-87



Note: Drop out rate from classes I -V for 1986-87 = No of students enrolled in class I to V in 1982-83) - (No of students in classes V in 1986-87).

Source: Dept. of Education, Ministry of Human Resources Development, New Delhi, Sep 1991, Annual Report, 1990.

On the Question of Resources

Several studies have shown that Madhya Pradesh government's allocation for education in per capita terms is rather low in comparison to the other state governments. In 1990-91, it was lower by 30 per cent compared to the corresponding all-States figure (Prabhu & Chatterjee 1993). While about half the states of the country allocate between 20 to 30 per cent of their budgeted expenditure for education Madhya Pradesh's expenditure on education was only 18.2 per cent. As much as 62.5 per cent of this amount is spent on elementary education and virtually 98.5 per cent of the total expenditure is incurred on salaries, and only a meager 1.5 per cent goes towards contingencies and other items. In terms of per capita expenditure on education in 1991-92 it was Rs. 196 in Madhya Pradesh as compared to Rs. 315 in Punjab and Rs. 256 in Gujarat.

Women Teachers

Madhya Pradesh has a large cadre of over 1,60,000 primary school teachers of whom only 35,000 are women. In rural areas, women constitute less than 10% of 1,20,000 teachers. The proportion of SC and ST teachers is not so low, however, being 14 per cent and 20 per cent respectively, but even among them women's representation is very low, being just 7%. A rather

high proportion, roughly 40 per cent, of the teachers in rural schools are untrained [MHDR, 1995].

V. EMPLOYMENT

The Census of 1991 gives a worker participation rate (WPR) of 42.7 per cent for Madhya Pradesh compared to the national average of 37.7 per cent (See Table 11). In the decade of 1981-91, however, the main workers in the state grew slower than its population; at 2.2 per cent per annum, compared to the population growth of 2.4%. The districts with lowest employment growth rates were Balaghat, Raigarh, Mandla, Habalpur, Seoni and Narsimhapur. The entire belt of Baghelkhand and Chattisgarh recorded lower rate of increase in workers to increase in population. If we take rural main workers only, they grew overall in the state by 1.9% per annum, though the population grew at 2.4% per annum in rural Madhya Pradesh. Urban population in the state grew at 3.78 per cent per annum, and main workers at 3.76 per cent per annum. This points clearly towards growing rural unemployment in the state, and a growing tendency towards urban migration [MPDR, 1995].

In terms of the share of non-farm employment in rural areas, Madhya Pradesh comes last in the country, with only 10.7 per cent employed in the sector, compared to the national share of 17.7 per cent.

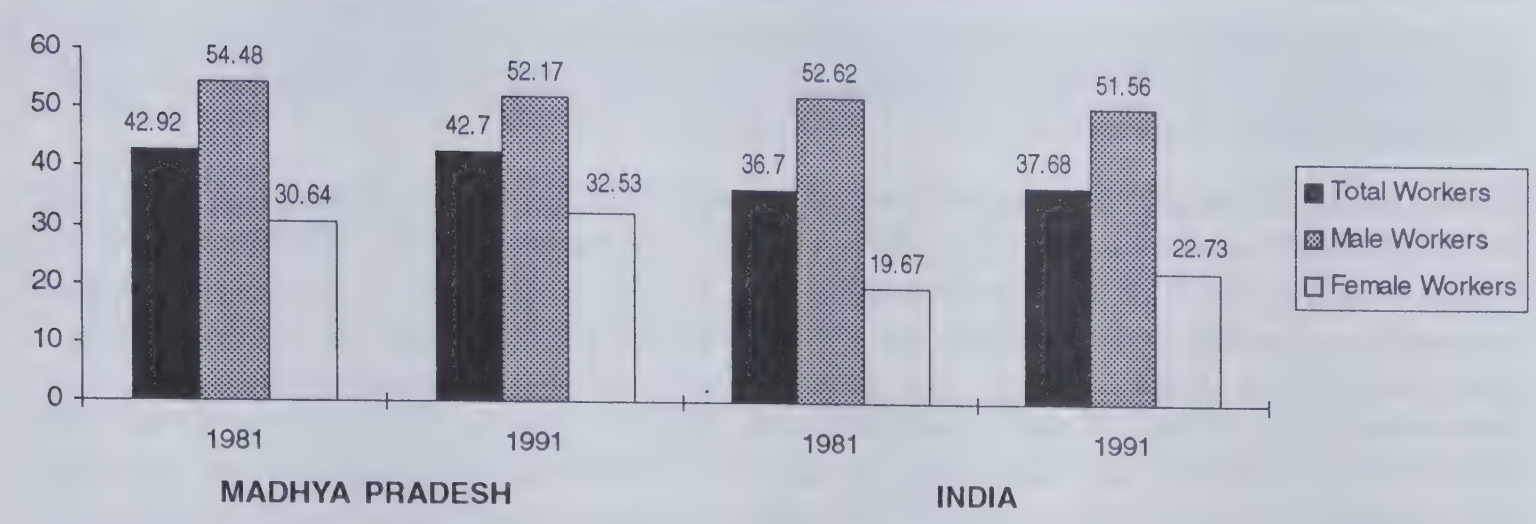
Female Work Participation Rate

In 1991 while 33 per cent of all women in the state were 'workers' only 23 per cent of all women were classified as main workers. Of the women employed as main workers, over 88 per cent were in the agricultural sector, 51 per cent as cultivators (or workers on family farm) and 37 per cent as agricultural labourers.

For the entire state, as well as for a large number of its districts, female work participation rate (FWPR) figure have improved between 1981 and 1991. FWPR was 39.3 per cent in rural areas, and 10.2 per cent in urban areas. Also FWPR rates were considerably lower to the north of the Satpura-Narmada divide and much higher to the south. The lowest rates were found in Bhind (4.2%), Morena (14.6 per cent), Gwalior (18.6 per cent) and Guna (24.4 per cent). The highest rates were recorded in the rice-growing regions of Chattisgarh, and in other tribal districts (Jhabua-52 per cent, Rajnandgaon-50 per cent, Bastar-49 per cent and Mandla-47 per cent). These are also districts with a relatively high proportion of ST population. Scheduled Tribe women form 68 per cent of all women in Bastar, 86 per cent in Jhabua, and 26 per cent in Ranjnandgaon. In general, FWPR rates are lowest in the northern districts, and high in the tribal dominated southern and south-eastern districts of the state.

Table 11

Work Participation Rate in 1981 and 1991



Source: Census of India, 1991.

Agriculture continues to be the main source of work and livelihood in Madhya Pradesh. Almost 80 per cent of the workers in the state still depend on agriculture compared to less than 70 per cent at the national level. According to one study, in Madhya Pradesh "as high as 92 per cent of the increase in main workers during 1981-91 had to be absorbed in the agricultural sector" (Kulkarni, 1994). The same study also reports that "Bihar, Madhya Pradesh and Rajasthan are the three states where almost the entire increase in female workers (above 95 per cent) is absorbed in the agricultural sector."

To some extent, the higher absorption of workers in agriculture in Madhya Pradesh may have been due to a significant increase in the production and productivity in the agricultural sector. The annual growth rate of the state's agricultural sector income is estimated to have been 2.51 per cent in the decade of 1981-91 as against 0.67% in the previous two decades. As a result more employment generation possibly took place in the agricultural sector during the eighties. However, the reason behind the noticeable drift of female workers to agriculture, particularly agricultural labour, may well have been connected to their shift from household industry, as Table 12 shows.

Table 12

Females per 1000 Males by Category of Main Workers

Category	Madhya Pradesh	
	1981	1991
Cultivators	345	415
Agri. Labourers	896	898
Household Industry	458	136
Others	128	154

Source: 1. A.K Shiva Kumar, 1995; 2. Census Report, 1991.

It can also be seen from the same table that agricultural labour is the only occupation in which the sex ratio i.e the number of female workers for every 1000 male workers, is the closest in Madhya Pradesh. Also, the ratio has not undergone any major change between 1981 and 1991, whereas in other major categories it has changed significantly. While, the ratio has improved somewhat for women classified as cultivators it has declined steeply for those engaged in household industry.

Table 13 presents the picture in regard to the dependence on agriculture for employment of both male and female workers in 1971 and 1981. Dependence exclusively on agriculture as the only source of livelihood is in itself an indication of a serious problem of employment, given the seasonality of agricultural operations and the level of cropping intensity, conditions which, no doubt, differ from place to place. It is generally accepted that in predominantly agricultural economies, the problem of employment reflects itself in what is often referred to as under employment. There are days and weeks during a year when the people engaged in agriculture have little work to do. To the extent this is valid, the incidence of under-employment will be greater on women, given their greater dependence on agriculture for work.

Table 13

Dependence on Agricultural Sector - 1981-91

Percentage of workers engaged in Agricultural Sector to Main Workers in Rural Areas-change during 1981-91.				
	Madhya Pradesh		India	
	1971	1981	1971	1981
Total Workers (per cent)	87.40	88.08	81.04	80.32
Change in per cent	-	+0.68	-	-0.72
Male Workers (per cent)	45.70	44.69	79.16	77.75
Change in per cent	-	+0.13	-	-1.41
Female Workers (per cent)	92.68	94.14	87.30	87.90
Change in per cent		+1.46		+0.60

Source: Kulkarni S., 1994.

As can be seen from Table 14, giving the occupational distribution of workers among the major employment categories, cultivators constitute 51.8 per cent of all main workers and agricultural labourers 23.5 per cent, accounting together for around three-fourths of the total. Cultivators are in Madhya Pradesh compared to the national average of 38.7, and the state has proportionately fewer agricultural labourers compared to the national average of 26.1 per cent.

In non-household manufacturing the state lags behind at 4.4 per cent of employment compared to the national figure of 7.6%. In household manufacturing the state employees only 2.4% showing a decline in this category. In other services with 7.6% employment, it is much less than the national share of 10.3 per cent. As can also be seen from the table there is little change in the profile of employment between 1981-91 in different categories.

Table 14
Share of Employment Under Different Categories

Category	Share in Employment 1981 (%)	Share in Employment 1991 (%)
Primary Sector	79.10	77.54
Secondary Sector	9.43	8.37
Tertiary Sector	11.49	14.09
Cultivators	51.96	51.75
Agricultural Labourers	24.24	23.51
Agriculture Allied	1.89	1.39
Mining and Quarrying	1.01	0.89
Manufacturing-Household	3.52	2.41
Manufacturing-Non Household	4.33	4.40
Construction	1.58	1.56
Trade and Commerce	3.87	4.77
Transport, Storag and Communication	1.63	1.70
Other Services	5.99	7.62

Source: Primary Census Abstract - 1981 and 1991.

Child Labour

Statistics of child labour, i.e, workers in the age group of 5-14, are available for 1971 and 1981 censuses. Next to Andhra Pradesh, Madhya Pradesh was the largest contributor of child labour in the country and, as can be seen from Table 15, its share increased significantly by within a short period of ten years, from 1971 to 1981, a rather disturbing situation.

For Madhya Pradesh with only 7.6% of the country's population to contribute it had more than 12 per cent of the country's child workers in 1981 should have been a cause for great concern. The occupational distribution of the child workers for the whole country shows that 78 per cent of them are employed in the agricultural sector, 6.3% in livestock, forestry and fishing, 8.6% in industries and the remaining 7.1% in the service sector. Though, since 1986 there is a national law prohibiting the employment of children, enforcement is obviously quite weak. In states like Madhya Pradesh it is even clearly weaker.

Table 15

No of Workers in the Age Group 5-14 years

State	1971 (lakh)	1981 (lakh)
Madhya Pradesh	11.2 (10.4)	13.71 (12.3)
India	107.34	111.68

Note: Figures in brackets are of Madhya Pradesh's share of child labour in the whole country.

Source: Indian Labour Statistics, 1980-81.

It is noteworthy that around 20 per cent of female workers are under 20 years of age in Madhya Pradesh, and that 70 per cent of the employees in the match industry are girls below 14 years of age. Quite disturbingly the number of female child labourers has been going up over recent years whilst the number of male child labourers has been declining.

Bonded Labour

Madhya Pradesh is one of the 11 states in India in which "bonded labour" system still exists, particularly among SCs and STs. Under this system, workers, mainly agricultural labourers, get themselves bonded to their landlords, who usually belong to other communities for paltry sums of money. They thus become permanent workers of landlords, working for wages far below the prevailing wage rate. This system is also prevalent in mines, quarries and brick kilns. "The bonded labour system" as the Planning Commission writes, "is one acute manifestation of this phenomenon of near slavery surviving through centuries."

In order to deal effectively with the problem of bonded labour, legislation was passed as early as 1976 making it the responsibility of the state government to identify bonded labourers, to take steps to get them released and to also provide the necessary financial assistance for rehabilitating them. The survey conducted by the National Sample Survey organisation had revealed that there were 3.25 lakh bonded labourers in all the eleven states together. The number of bonded labourers identified and released by the state government so far in Madhya Pradesh adds up to 7456.

Female Deprivation

Having discussed already literacy level, age at marriage and employment opportunities for women it is possible to see if the three together have something to say about women's status in a state. A composite index looking at female advancement or deprivation has been constructed on the basis of these three factors. (Shiva Kumar 1995). This can give us some ideas of the deprivation that women face.

Table 16

Index of Female Deprivation.

Index	Madhya Pradesh	India
Female literacy rate per cent in the 15+ age group	16	26
% Women not married in the age group 15-19%	38 (62% married)	54 (46% married)
Female work participation (% in age group 15-59)	36	23
Rate of deprivation		
Literacy	0.86	0.76
Marriage	0.70	0.51
Employment	0.57	0.73
Average Index of deprivation	0.71	0.67
Composite index of maternal advancement (IMR)	29	19

Source: Shiv Kumar, 1995.

As can be seen from the Table 16, in regard to both female literacy and age at marriage Madhya Pradesh does rather poorly when compared to all-India. On the count of female participation in work, Madhya Pradesh does, no doubt, better. But one has to be cautious in interpreting this as an index of female advancement, since higher work participation by women and that too in low paying, arduous employment, can reflect more deprivation than advancement. And that perhaps is the case in Madhya Pradesh. If, however higher female work participation in Madhya Pradesh is still regarded as a positive index (as Shiva Kumar does) the index of deprivation of women of the state does not look too bad relative to that for all-India. The average index of female deprivation works out to 0.71 in Madhya Pradesh as compared to 0.67 to India.

VI. INCIDENCE OF POVERTY

As noted already, the state has been amongst the poorest in the country in terms of per capita income. The level of poverty also continues to be high. Over 55 lakh families, or 3 crore people, live below the poverty line in rural Madhya Pradesh, according to the rural poverty survey conducted by the state government for IRDP in 1992. They constituted over 60 per cent of rural families. The average income of a poor family was Rs. 4,653 per annum, less than half of the rural poverty line of Rs. 11,000 per family fixed for the purposes of IRDP assistance.

The poverty line is defined by the Planning Commission on the basis of a per capita average requirement of 2400 calories per day in rural areas and 2100 calories per day in urban areas.

The consumption expenditure level at which the average calories intake meets this norm is defined as the poverty line. Table 16 gives the percentage of poor estimated by the Planning Commission Expert Group. It can be seen that (a) the incidence of poverty in Madhya Pradesh, rural as well as urban, is higher than in whole of India and (b) the gap is much greater in regard to urban areas. Perhaps the drift of the population from rural to urban areas of Madhya Pradesh is much greater.

Table 17

Estimated Rural Poverty: 1973-74 to 1993-94.

Year	Madhya Pradesh			India		
	Overall	Rural	Urban	Overall	Rural	Urban
1973-74	61.90	62.66	58.34	54.93	56.44	49.23
1977-78	62.40	62.52	62.05	51.81	53.07	47.40
1983	50.13	48.90	54.59	44.76	45.61	42.15
1987-88	43.40	41.92	48.17	39.34	39.06	40.12
1993-94	-	40.83	-	-	37.52	-

Source: CMIE 1996, & Chandra Sekhar and Sen 1996.32.

The state government has been implementing a number of poverty alleviation programmes especially in the last two decades, particularly for improving the employment conditions in rural population. One important programme is the Integrated Rural Development Programme (IRDP). Under IRDP the poor rural families are provided funds to acquire income generating assets through a mix of subsidy and institutional credit. During the decade of 1980-90, the number of poor families assisted in Madhya Pradesh was 32 lakh and total assistance provided was Rs. 1350 crores, comprising of Rs. 879 crores of bank credit and Rs. 471 crores of subsidy. Thus the assistance given per family was Rs.4231. This is higher than the figure for all states together. The assistance provided under this scheme for whole of India was lower at Rs. 3872 per family (CMIE, 1991).

Data for land distribution in Madhya Pradesh also shows high levels of rural inequality. Overall, in the state, 36 per cent of peasants having up to one hectare of land, account for only 5.5% of total area. On the other side, 4.9% of land owners own 28.2 per cent of agricultural land in the state.

Atrocities against Weaker Sections

Table 18

Atrocity Cases Against Scheduled Castes - 1977-85

Year	No of cases registered in Madhya Pradesh	No of cases registered All India	Percentage
1977	3366	10859	31.0
1981	4033	14151	28.5
1983	5292	14996	35.7
1984	6128	16573	37.0
1985	4890	15011	32.6
Annual Average	4382	14334	30.6

Source: CMIE, 1991.

There are special provisions in the Indian Constitution to protect SCs and STs from atrocities. Special police cells are functioning in each state, including Madhya Pradesh, to deal with such atrocities. Despite these measures, the number of atrocity cases registered is on the increase. Table 18 gives the number of cases of atrocities against SCs registered during the year 1977-85.

It can be seen that nearly one-third of the reported atrocities against SCs all over India are from Madhya Pradesh. It is also noteworthy that of those registered atrocity cases in the whole country, nearly one-fourth involved grievous hurt, arson, rape and murder. Clearly, the situation in this regard is particularly alarming in Madhya Pradesh. It should be added that similar information in regard to atrocities against STs is not the reality available.

CONCLUSION

On the basis of the evidence presented above, the social indicators of Madhya Pradesh are far from satisfactory. The three areas of social development namely health, education, and employment seem to be priority areas for intervention. The picture in general is bleak but it is particularly bad for women and for SCs and STs. The health care of SCs and STs is particularly in need of immediate attention. This becomes even more important because the state government has been remiss in addressing these issues. It is only fair to say that present status of women in Madhya Pradesh need substantial improvement, especially with regard to life-chances and resources relevant to human development. Much of this results from the traditions prevalent in the country, and Madhya Pradesh is no exception to the rule of patriarchy. The inadequacy of infrastructural support is felt even more by women and children, as they are at the bottom of the matrix of inequality.

The physical distance between people and services means that women and girl children are the first to be excluded in access to human development. This scenario gives a sense that for the present the burden of history lies heavily on the women of Madhya Pradesh. ■

REFERENCES

Agarwal, Bina. (1986), ***"Women, Poverty and Agricultural Growth in India,"*** The Journal of Peasant Studies, Vol 13 (4) : pp 165-220.

Bhat, Mari.(1995), ***"Maternal Mortality: Estimates,"***, Das Gupta et al. (eds.) Women's Health in India: Risk and Vulnerability, Oxford University Press, Oxford.

Chandra Sekhar C.P. and Sen Abhijith, (1996), ***"Poverty Estimates,"*** Frontline, Feb 23, 1996.

Census of India, 1981, (1981), ***"Special Reports and Tables based on 5 per cent Sample Data,"*** Series 4, Part 2, Bihar, Registrar General, New Delhi.

Census of India, 1981, (1981), ***"A Portrait of the Population of Bihar,"*** Registrar General, New Delhi.

Census of India, 1981. (1981), ***"A Portrait of the Population of Madhya Pradesh,"*** Registrar General, New Delhi.

Census of India, 1991, (1991), ***"Provisional Population Tables,"*** Series 1, Paper 1, Registrar General, New Delhi.

Census of India, 1991, (1991), ***"Final Population Totals: Brief Analysis of Primary Census Abstract,"*** Series 1, Paper 1, Registrar General, New Delhi.

Central Bureau of Health Statistics, (1990), ***"Health Statistics,"*** CBHS, New Delhi.

Centre for Monitoring Indian Economy, (1992), ***"District Level Data for Key Economic Indicators,"*** CMIE, Bombay.

Centre for Monitoring Indian Economy, (1991), ***"Basic Statistics Relating to the Indian Economy,"*** Vol.2, States, CMIE, Bombay.

Central Statistical Organisation, (1992), ***"Selected Socio-economic Indicators,"*** CSO, New Delhi.

Duggal, .Ravi, et.. al., (1995), ***"Health Expenditures across States,"*** Economic and Political Weekly, Special Statistics II, Vol. XXX, No. 16. pp: 901-908, Bombay.

Economic and Political Weekly Research Foundation, (1994), ***"Social Indicators of Development for India,"*** Economic and Political Weekly, Special Statistics II, Vol. XXIX, No.21, Bombay.

Economic and Political Weekly Research Foundation, (1994), ***"State-wise Birth Rates, Death Rates and Infant Mortality Rates,"*** Economic and Political Weekly, Special Statistics II, Vol. XXIX, No.21.

Government of Madhya Pradesh,(1995), ***"Madhya Pradesh Human Development Report"***.

Government of India, (1991), ***"Health Information of India 1991,"*** Ministry of Health and Family Welfare, New Delhi.

Government of India, (1992), ***"Rural Health Statistics in India 1992,"*** Ministry of Health and Family Welfare, New Delhi.

Government of India, (1992), ***"Bulletin on Rural Health Statistics in India 1992,"*** Ministry of Health and Family Welfare, New Delhi.

Government of India, (1992), ***"Family Welfare Year Book,"*** Ministry of Health and Family Welfare, New Delhi.

Indian Council for Medical Research, ICMR, (1991), ***"Evaluation of Quality of Family Welfare Services at Primary Health Centre Level,"*** An ICMR Task Force Study, ICMR, New Delhi.

International Institute for Population Sciences, (1992), ***"National Family Health Survey, Bihar,"*** Summary Report, Bombay, IIPS.

International Institute for Population Sciences, (1992), ***"National Family Health Survey,"*** Madhya Pradesh. Summary Report, Bombay, IIPS.

Prabhu, K.S. and Somnath Chatterjee, (1993), ***"Social Sector Expenditures and Human Development,"*** A Study of Indian States, Department of Economic Analysis and Policy, Reserve Bank of India, Bombay

Registrar General of India, (1981), ***"Sample Registration System, 1981,"*** Vital Statistics Division, Ministry of Home Affairs, New Delhi.

Registrar General of India, (1989), ***"Sample Registration System 1989,"*** Vital Statistics Division, Ministry of Home Affairs, New Delhi.

Sharma, A.N., (1995), ***"Political economy of poverty in Bihar,"*** Economic and Political Weekly, Vol. XXX. No.41 & 42, pp: 2587-2602.

Shiva Kumar, A.K., (1995), ***"Women's Capabilities and Infant Mortality: Lessons from Manipur,"*** Das Gupta et al. (eds.) Women's Health in India: Risk and Vulnerability, Oxford University Press, Oxford.

Tata Services Limited, (1993), ***"Statistical Outline of India, 1992-93,"*** Department of Economics and Statistics, TSL, Bombay.

Tilak, JBG, (1996), ***"How ..... free primary education in India,"*** Economic and Political Weekly, Vol. XXXI, No. 6, Feb 10, 1996.

Uplekar, M. and Alex George, (1994), ***"Access to Health Care in India,"*** Discussion Paper, Series No.12., CDS, Trivandrum.

Hivos Regional Office Bangalore
List of available Hivos Publications

1. Hivos Regional Office ***Annual Report*** 1992, 1993, 1994, 1995, 1996.
2. Technical Report Series 1.1, ***AIDS: Impact and Intervention.***
   Editors: Rajendran Nathan, Joy D'Souza and Shobha Raghuram, 1992.
3. Technical Report Series 1.2, ***Development Policies: Issues and Challenges for the '90s,***
   Editor: Shobha Raghuram, 1992. (No Stock)
4. A Reference Manual, ***Management and Accounting Systems in the Voluntary Sector,***
   Editor: Sangeetha, 1992.
5. Technical Report Series 1.3, ***Future of the Co-operatives in India,***
   Editor: Reena Fernandes, 1993.
6. Proceedings of a Consultation Gender and Development
   Women in India: Reflecting on our History, Shaping our Future,
   Editor: Jamuna Ramakrishna, 1993, (IInd Edition)
7. ***Savings and Credit Systems of the Poor: Some Non-Governmental Organisation (NGO) Experiences,*** A Hivos-Novib Publication (No Stock)
   Editor: D. Rajasekhar, 1994.
8. ***Structural Adjustment: Economy, Environment and Social Security,***
   (Can be obtained from Macmillan)
   Editors: Shobha Raghuram, Heiko Sievers and Vinod Vyasulu, Macmillan, New Delhi, 1995.
9. Technical Report Series 1.4, ***Rethinking Population,*** Jointly organised by Hivos Regional Office South Asia, Bangalore, Co-ordination Unit, Bangalore and the Centre for Reproductive Law and Policy, New York,
   Editors: Shobha Raghuram and Anika Rahman, 1996.
10. Leela Gulati, R. Ramalingam, ***Poverty and Deprivation: Some Inter-State Comparisons,***
    A Hivos Monograph, 1996.
11. J. Mohan Rao, ***Local Development in a Globalizing World,***
    A Hivos Monograph, 1996.
12. Technical Report Series 1.5, ***Voluntary Organisations and Good Governance: Formation, Resource Mobilisation, Accounting and Management,***
    Editor: Sangeetha, 1997.

13. Technical Report Series 1.6, ***Recasting HIV/AIDS as a Development Issue: Of Rights and Resistance,***
    Editors: Shobha Raghuram and Rajendran Nathan, 1997.

14. Technical Report Series 1.7, ***Livelihood Strategies of the Rural Poor and the Environment Challenges Ahead,***
    A Joint Initiative of Hivos and AME, 1998.
    Editor: Jamuna Ramakrishna

15. Leela Gulati and R. Ramalingam, ***Poverty and Deprivation: Profiles of Bihar and Madhya Pradesh.***
    A Hivos Monograph, 1998

These Publications are for internal circulation.

Series Editor

Hivos, the Humanist Institute for Co-operation with Developing Countries, is a development agency established in 1968 by representatives of the Humanist movement in The Netherlands. Hivos is inspired by the humanist, secular outlook. Hivos co-operates with Non-Governmental Organisations (NGOs) and social organisations in the South. It supports organisations that enable marginalised people to assert their rights and improve their access to decision-making.

In its policy Hivos gives priority to the following five special themes: economic self-reliance; culture and the arts; gender, women in development; environment and development; human rights and HIV/AIDS. For the first two sectors separate funds have been set up, viz., the Hivos Triodos Fund and the Hivos Culture Fund.

In order to have an impact, Hivos wishes to focus its funding efforts. One way in which this is done is by limiting the geographic area in which Hivos works. In 1997, Hivos provided support to over 700 organisations in 29 countries concentrated in Southern and East Africa, Central America, the Andes, and Asia. In Asia, Hivos concentrates its efforts in India, Sri Lanka, Indonesia, Malaysia and the Central Asian Republics of the former Soviet Union. India is the largest country programme in Asia. Hivos supports organisations in the following states: Tamil Nadu, Karnataka, Andhra Pradesh, Orissa, Gujarat, Goa, Maharashtra, Rajasthan and New Delhi.

As one of the four Dutch co-financing agencies, Hivos receives a large part of its funds from the co-financing budget line of the Ministry for Development Co-operation. Hivos's total expenditures for 1997 amounted to 89.5 million Dutch guilders, 22.4% of this being spent in Asia. 80 per cent of Hivos's income was derived from the Co-financing programme. Other main sources was additional project-based funding by the Dutch government (12%), the European Union (4%) and private funding sources (4%). The value of the loans portfolio of Hivos and of the Hivos Triodos Fund amounted to 15.2 million Dutch guilders.

Hivos

HUMANIST INSTITUTE FOR CO-OPERATION WITH DEVELOPING COUNTRIES, NETHERLANDS
INDIA REGIONAL OFFICE: FLAT NO. 402, EDEN PARK, NO. 20, VITTAL MALLYA ROAD, BANGALORE - 560 001
TEL: 2270367, 2210514 FAX: 91-80 2270367 E-mail: hivos@hivos-india.org